

# **PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY**

**Superior Aluminum Alloys, L.L.C.  
14214 Edgerton Road  
New Haven, IN 46774**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T003-11452-00286	
Issued by: Original Signed Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 24, 2002  Expiration Date: June 24, 2007

## TABLE OF CONTENTS

### SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

### SECTION B GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-95]
- B.3 Enforceability [326 IAC 2-7-7]
- B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]
- B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
- B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
- B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)] [326 IAC 1-6-3]
- B.12 Emergency Provisions [326 IAC 2-7-16]
- B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
- B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)][326 IAC 2-7-9]
- B.17 Permit Renewal [326 IAC 2-7-4]
- B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]
- B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
- B.21 Source Modification Requirement [326 IAC 2-7-10.5]
- B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]
- B.23 Transfer of Ownership or Operation Control [326 IAC 2-7-11]
- B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

### SECTION C SOURCE OPERATION CONDITIONS

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
- C.7 Stack Height [326 IAC 1-7]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

#### Testing Requirements [326 IAC 2-7-6(1)]

- C.9 Performance Testing [326 IAC 3-6]

## **TABLE OF CONTENTS (Continued)**

### **Compliance Requirements [326 IAC 2-1.1-11]**

- C.10 Compliance Requirements [326 IAC 2-1.1-11]

### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

- C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

### **Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

- C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
- C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

### **Stratospheric Ozone Protection**

- C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

## **SECTION D.1 FACILITY OPERATION CONDITIONS - Furnaces**

### **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.1.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [40 CFR 52.21]
- D.1.2 General Provisions Relating to NESHAP [326 IAC 20-1] [40 CFR Part 63, Subpart A]
- D.1.3 Secondary Aluminum Smelting Limits [40 CFR Part 63, Subpart RRR]
- D.1.4 Labeling [40 CFR Part 63.1506(b)]
- D.1.5 Capture and Control Systems [40 CFR Part 63.1506(c)]
- D.1.6 Operation, Maintenance, and Monitoring (OM&M) Plan [63.1510(b)]
- D.1.7 Particulate Matter (PM) [326 IAC 6-3]
- D.1.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

### **Compliance Determination Requirements**

- D.1.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart RRR]
- D.1.10 Particulate Matter (PM) and Capture/Collection Systems [40 CFR 63.1506(c)]
- D.1.11 Feed/Charge Determination [40 CFR 63.1506(d)]
- D.1.12 Secondary Aluminum Smelting Compliance Determination [40 CFR Part 63, Subpart RRR]

### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.1.13 Labeling [40 CFR Part 63.1510(c)]
- D.1.14 Capture/Collection System [63.1510(d)]
- D.1.15 Feed/Charge Determination [40 CFR 63.1510(e)]
- D.1.16 Fabric Filter Monitoring Requirements [40 CFR 63.1510(f)]
- D.1.17 Fabric Filter Inlet Temperature Monitoring Requirements [40 CFR 63.1510(h)]
- D.1.18 Corrective Action [40 CFR 63.1506(p)]
- D.1.19 Compliance Monitoring Requirements [40 CFR 63.1510(t)] [40 CFR 63.1510(u)]

## **TABLE OF CONTENTS (Continued)**

- D.1.20 Parametric Monitoring
- D.1.21 Baghouse Inspections
- D.1.22 Broken or Failed Bag Detection

### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.1.23 Record Keeping Requirements
- D.1.24 Secondary Aluminum Smelting Record Keeping and Reporting Requirements  
[40 CFR Part 63, Subpart RRR]
- D.1.25 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart  
RRR]
- D.1.26 Reporting Requirements

## **SECTION D.2 FACILITY OPERATION CONDITIONS - Scrap Shredder**

### **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.2.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
- D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.2.3 Secondary Aluminum Production Limits [40 CFR Part 63, Subpart RRR]
- D.2.4 Particulate Matter (PM) [326 IAC 6-3]
- D.2.5 Labeling [40 CFR Part 63.1506(b)]
- D.2.6 Capture and Control Systems [40 CFR Part 63.1506(c)]
- D.2.7 Operation, Maintenance, and Monitoring (OM&M) Plan [63.1510(b)]
- D.2.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

### **Compliance Determination Requirements**

- D.2.9 Particulate Matter (PM) and Capture/Collection Systems [40 CFR 63.1506(c)]
- D.2.10 Secondary Aluminum Compliance Determination [40 CFR Part 63, Subpart RRR]

### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.2.11 Labeling [40 CFR Part 63.1510(c)]
- D.2.12 Capture/Collection System [40 CFR Part 63.1510(d)(2)]
- D.2.13 Monitoring Requirements [40 CFR 63.1510(f)]
- D.2.14 Parametric Monitoring
- D.2.15 Baghouse Inspections
- D.2.16 Broken or Failed Bag Detection
- D.2.17 Corrective Action [40 CFR 63.1506(p)]

### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.2.18 Record Keeping Requirements
- D.2.19 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63,  
Subpart RRR]
- D.2.20 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart  
RRR]

## **SECTION D.3 FACILITY OPERATION CONDITIONS - Scrap Dryer**

### **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

- D.3.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [40 CFR 52.21]
- D.3.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.3.3 Secondary Aluminum Production Limits [40 CFR Part 63, 1505] [40 CFR Part 63.1506]
- D.3.4 Labeling [40 CFR Part 63.1506(b)]
- D.3.5 Feed/Charge Determination [40 CFR 63.1506(d)]
- D.3.6 Capture and Control Systems [40 CFR Part 63.1506(c)] [63.1510(d)]
- D.3.7 Operation, Maintenance, and Monitoring (OM&M) Plan [63.1510(b)]

## **TABLE OF CONTENTS (Continued)**

- D.3.8 BACT (Best Available Control Technology) Condition
- D.3.9 Particulate Matter (PM) [326 IAC 6-3]
- D.3.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

### **Compliance Determination Requirements**

- D.3.11 Fabric Filter Compliance Requirements [40 CFR 63.1506(c)]
- D.3.12 Afterburner Compliance Requirements [40 CFR 63.1506(g)]
- D.3.13 VOC Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

- D.3.14 Labeling [40 CFR 63.1510(c)]
- D.3.15 Capture/Collection System [40 CFR 63.1510(d)(2)]
- D.3.16 Feed/Charge Determination [40 CFR 63.1510(e)]
- D.3.17 Fabric Filter Monitoring Requirements [40 CFR 63.1510(f)]
- D.3.18 Afterburner Monitoring Requirements [40 CFR 63.150(g)]
- D.3.19 Fabric Filter Inlet Temperature Monitoring Requirements [40 CFR 63.1510(h)]
- D.3.20 Corrective Action for 40 CFR 63, Subpart RRR [40 CFR 63.1506(p)]
- D.3.21 Parametric Monitoring
- D.3.22 Baghouse Inspections
- D.3.23 Broken or Failed Bag Detection

### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

- D.3.24 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]
- D.3.25 Record Keeping Requirements
- D.3.26 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR]

## **SECTION D.4 FACILITY OPERATION CONDITIONS**

### **Emission Limitations and Standard [326 IAC 2-7-5(1)]**

- D.4.1 Particulate Matter (PM) Limitations [326 IAC 6-3-2]
- D.4.2 Particulate Matter (PM) Limitations [326 IAC 6-3-2]

Certification  
Emergency Occurrence Report  
Quarterly Report  
Quarterly Deviation and Compliance Monitoring Report

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

---

The Permittee owns and operates a stationary, secondary aluminum production plant.

Responsible Official:	CEO & President, Superior Aluminum Alloys
Source Address:	14214 Edgerton Road, New Haven, Indiana 46774
Mailing Address:	P O Box 678, New Haven, IN 46774
Phone number:	(219) 749-7599
SIC Code:	3341
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

---

This stationary source consists of the following emission units and pollution control devices:

- (a) Four (4) natural gas-fired Reverberatory Furnaces, identified as furnace #1 (to be constructed), furnace #2 (to be constructed), furnace #3 (constructed in 2000) and furnace #4 (to be constructed), each with: a maximum capacity of 28,000 pounds of aluminum scrap per hour, chlorine flux of 10,233 pounds per eight-hour charge, and a heat input capacity of 28 MMBtu/hr, emissions controlled by four (4) fabric filter baghouses with lime injection (baghouses E and F are manually lime injected, baghouses L and N are equipped with continuous lime injection), with furnaces #1 and #2 exhausting to stacks E and F, furnace #3 exhausting to stack L, and furnace #4 exhausting to stack N, respectively.
- (b) One (1) natural gas-fired Rotary Furnace, identified as furnace M, to be constructed, with a maximum capacity of 12,000 pounds of aluminum scrap per hour and a maximum heat input capacity of 12 MMBtu/hr, with emissions controlled by fabric filter baghouse N equipped with continuous lime injection, and exhausting to stack N.
- (c) One (1) Scrap Shredder, identified as unit C, constructed in 1998, with a maximum capacity of 25,000 pounds aluminum scrap per hour, with emissions controlled by fabric filter baghouse C (exhausting indoors).
- (d) One (1) Scrap Dryer, identified as unit D, constructed in 1998, with a maximum drying capacity of 12,000 pounds aluminum scrap per hour and 6 MMBtu/hr, with emissions controlled by fabric filter baghouse D with manual lime injection and a 12 MMBtu/hr afterburner, and exhausting to stack D.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

---

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Cleaners and solvents characterized as follows: A) having a vapor pressure equal to or less than 2kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 degrees F) or; B) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 degrees C (68 degrees F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2]
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

---

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B

## GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

### B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

### B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.



**B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]**

---

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

**B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]**

---

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

**B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]**

---

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

- 
- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
    - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
    - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
    - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

**B.12 Emergency Provisions [326 IAC 2-7-16]**

---

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,  
Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

**B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]**

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) In addition to the applicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:
  - (1) Condition 11 from CP 003-9243-00286, issued on May 1, 1998 which requires that the Permittee shall record the static pressure drops across the baghouses used in conjunction with the Reverberatory Furnaces #1 and #2, Scrap Dryer and Scrap Shredder once per day.

The static pressure drop across the respective baghouses is required to be recorded once per shift and when venting to the atmosphere, instead of once per day, to clarify, reflect, and be consistent with, IDEM guidance regarding monitoring requirements for baghouses.

- (2) Condition D.1.1 from SSM 003-11927-00286, issued June 7, 2000 which states that:
- (A) The NO<sub>x</sub> emissions from reverberatory furnace #3 charging and melting shall not exceed 3.50 pounds per hour.
  - (B) The NO<sub>x</sub> emissions from reverberatory furnace #4 charging and melting shall not exceed 3.50 pounds per hour.
  - (C) The NO<sub>x</sub> emissions from the rotary furnace M shall not exceed 1.5 pounds per hour.

IDEM has determined that the NO<sub>x</sub> limits were based on inappropriate emission factors which were consequently used to produced PSD Minor limits in SSM 003-11927-00286 that do not sufficiently limit the source to below PSD threshold levels. As a result, these limits are not included in this Part 70 permit. This Title V Part 70 permit includes an aggregate scrap aluminum feed/charge limit for the four reverberatory furnaces to limit the source's NO<sub>x</sub> emissions to less than PSD significance levels. See *State Rule Applicability - Entire Source* of this TSD for more information.

- (3) Condition D.1.1 from SSM 003-11927-00286, issued June 7, 2000 states that:
- (A) The PM emissions from baghouses E, F, and L (controlling furnaces #1, #2, and #3) combined shall not exceed 2.408 pounds per hour.
  - (B) The PM<sub>10</sub> emissions from baghouses E, F and L (controlling furnaces #1, #2, and #3) combined shall not exceed 2.408 pounds per hour.
  - (C) The PM emissions from baghouse N (controlling reverberatory furnace #4 and rotary furnace M) shall not exceed 1.204 pounds per hour.
  - (D) The PM<sub>10</sub> emissions from baghouse N (controlling reverberatory furnace #4 and rotary furnace M) shall not exceed 1.204 pounds per hour.

IDEM has converted these PM and PM<sub>10</sub> emission limits on a pound per hour basis to limits on a pound per ton aluminum produced basis to be consistent with the limited aluminum production rate included in this permit.

- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

**B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

---

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

**B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

---

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination**  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

---

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.17 Permit Renewal** [326 IAC 2-7-4]

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
  - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]  
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]  
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

**B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]



B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]  
[326 IAC 2-7-12 (b)(2)]

---

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

---

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
and  
  
United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590  
  
in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
  - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

**B.21 Source Modification Requirement [326 IAC 2-7-10.5]**

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

**B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]**

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]**

---

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]**

---

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
---------------

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 **Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]**  
Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- C.2 **Opacity [326 IAC 5-1]**  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.3 **Open Burning [326 IAC 4-1] [IC 13-17-9]**  
The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- C.4 **Incineration [326 IAC 4-2] [326 IAC 9-1-2]**  
The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.
- C.5 **Fugitive Dust Emissions [326 IAC 6-4]**  
The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 **Operation of Equipment [326 IAC 2-7-6(6)]**  
Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is (are) in operation.
- C.7 **Stack Height [326 IAC 1-7]**  
The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

---

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

### **Testing Requirements [326 IAC 2-7-6(1)]**

#### **C.9 Performance Testing [326 IAC 3-6]**

---

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

### **Compliance Requirements [326 IAC 2-1.1-11]**

#### **C.10 Compliance Requirements [326 IAC 2-1.1-11]**

---

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

#### **C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

---

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

**C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

---

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

**C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

---

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature or flow rate the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

---

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]**

---

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]**

---

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the



applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

---

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]**

---

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- The emission statement does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

**C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]**

---

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]**

---

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

#### **Stratospheric Ozone Protection**

##### **C.21 Compliance with 40 CFR 82 and 326 IAC 22-1**

---

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Furnaces

- (a) Four (4) natural gas-fired Reverberatory Furnaces, identified as furnace #1 (to be constructed), furnace #2 (to be constructed), furnace #3 (constructed in 2000) and furnace #4 (to be constructed), each with: a maximum capacity of 28,000 pounds of aluminum scrap per hour, chlorine flux of 10,233 pounds per eight-hour charge, and a heat input capacity of 28 MMBtu/hr, emissions controlled by four (4) fabric filter baghouses with lime injection (baghouses E and F are manually lime injected, baghouses L and N are equipped with continuous lime injection), with furnaces #1 and #2 exhausting to stacks E and F, furnace #3 exhausting to stack L, and furnace #4 exhausting to stack N, respectively.
- (b) One (1) natural gas-fired Rotary Furnace, identified as furnace M, to be constructed, with a maximum capacity of 12,000 pounds of aluminum scrap per hour and a maximum heat input capacity of 12 MMBtu/hr, with emissions controlled by fabric filter baghouse N equipped with continuous lime injection, and exhausting to stack N.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [40 CFR 52.21]

The following conditions apply to Reverberatory Furnaces #1 through #4 and Rotary Furnace M:

- (a) The combined input of aluminum scrap to reverberatory furnaces #1, #2, #3, and #4 shall not exceed 300,000,000 pounds per twelve consecutive month period. This aluminum feed/charge limit, in combination with the unlimited NO<sub>x</sub> emission rate from the Rotary Furnace and unlimited NO<sub>x</sub> emissions from the Scrap Dryer, and Melt Pots, will effectively limit the source's potential to emit nitrogen oxides (NO<sub>x</sub>) to less than 100 tons per twelve (12) consecutive month period.
- (b) NO<sub>x</sub> emissions from each of the reverberatory furnaces #1, #2, #3, and #4 shall not exceed 0.25 pounds per ton of aluminum charged and 0.01 pounds per ton of aluminum poured/cast.
- (c) The amount of flux used in each furnace shall be limited to 11,205,135 pounds per twelve consecutive month period.
- (d) The PM emissions from each furnace (Reverberatory Furnaces #1 through #4 and Rotary Furnace M) shall not exceed 0.1 pounds per ton aluminum melted.
- (e) The PM<sub>10</sub> emissions from each furnace (Reverberatory Furnaces #1 through #4 and Rotary Furnace M) shall not exceed 0.1 pounds per ton aluminum melted.

Compliance with these limits render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

#### D.1.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to reverberatory furnaces #1, #2, #3, #4 and Rotary Furnace M except when otherwise specified in 40 CFR Part 63, Subpart RRR.

### D.1.3 Secondary Aluminum Smelting Limits [40 CFR Part 63.1500 (Subpart RRR)]

Pursuant to 40 CFR Part 63.1505, the following conditions shall apply to the reverberatory furnaces #1, #2, #3, #4 and Rotary Furnace M.

- (a) The Permittee shall be in compliance with the following emission limitations and operating requirements upon startup:
- (1) The Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of:

$$L_{cPM} = \frac{\sum_{i=1}^n (L_{tiPM} \times T_{ti})}{\sum_{i=1}^n T_{ti}}$$

where  $L_{tiPM}$  = The PM emission limit for individual emission unit in the secondary aluminum processing unit I in paragraph (i)(1) and (2) of 40 CFR 63.1505.  
 $T_{ti}$  = The feed/charge rate for individual emission unit I; and  
 $L_{cPM}$  = The PM emission limit for secondary aluminum processing unit I.

The PM emission limit ( $L_{cPM}$ ) for a Group 1 furnace without an in-line fluxer (each reverberatory furnace and Rotary Furnace M) at a secondary aluminum production facility shall be 0.40 pounds per ton of feed/charge or per ton of aluminum produced. [40 CFR 63.1505(i)][40 CFR 63.1505(k)]

- (2) The Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl in excess of:

$$L_{cHCl} = \frac{\sum_{i=1}^n (L_{tiHCl} \times T_{ti})}{\sum_{i=1}^n T_{ti}}$$

where  $L_{tiHCl}$  = The HCl emission limit for individual emission unit in the secondary aluminum processing unit I in paragraph (i)(4) of 40 CFR 63.1505.  
 $T_{ti}$  = The feed/charge rate for individual emission unit I; and  
 $L_{cHCl}$  = The HCl emission limit for secondary aluminum processing unit I.

The HCl emission limit ( $L_{cHCl}$ ) for a Group 1 furnace without an in-line fluxer (each reverberatory furnace and Rotary Furnace M) at a secondary aluminum production facility shall be 0.40 pounds per ton of feed/charge or per ton of aluminum produced. [40 CFR 63.1505(i)][40 CFR 63.1505(k)]

- (3) The Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of total tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans (D/F) in excess of:

$$L_{cDF} = \frac{\sum_{i=1}^n (L_{iDF} \times T_{ii})}{\sum_{i=1}^n T_{ii}}$$

where  $L_{iDF}$  = The D/F emission limit for individual emission unit in the secondary aluminum processing unit; and  
 $L_{cDF}$  = The D/F emission limit for secondary aluminum processing unit.

The D/F emission limit ( $L_{cDF}$ ) for a Group 1 furnace without an in-line fluxer (Reverberatory Furnaces #1 through #4 and Rotary Furnace M) at a secondary aluminum production facility shall be 15 micrograms of D/F TEQ per megagram ( $2.1 \times 10^{-4}$  gr of D/F TEQ per ton) of feed/charge. Where TEQ is the toxicity equivalents for dioxins and furans as defined in 40 CFR 60.2125 (July 2001) [40 CFR 63.1505(i)][40 CFR 63.1505(k)]

- (b) Identification, emission limits and means of compliance shall be posted on the reverberatory furnaces #1, #2, #3, #4 and rotary furnace M.

#### D.1.4 Labeling [40 CFR Part 63.1506(b)]

The owner or operator shall provide and maintain easily visible labels that shall be posted at the furnaces. Said labels shall identify the applicable emission limits and means of compliance, including:

- (a) the type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer); and
- (b) the applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

#### D.1.5 Capture and Control Systems [40 CFR Part 63.1506(c)]

Pursuant to 40 CFR 63.1506(c), the owner or operator of the furnaces must:

- (a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference: 40 CFR 63.1502)
- (b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- (c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

#### D.1.6 Operation, Maintenance, and Monitoring (OM&M) Plan [63.1510(b)]

---

The owner or operator must prepare and implement for each furnace, scrap shredder and scrap dryer and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator must submit the plan to the applicable permitting authority for review and approval as part of the application for a part 70 or part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (b) A monitoring schedule for each affected source and emission unit.
- (c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in §63.1505.
- (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - (1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - (2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.
- (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in 40 CFR 63.1510(b)(1), including:
  - (1) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

#### D.1.7 Particulate Matter (PM) [326 IAC 6-3]

---

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

- (a) The particulate matter (PM) emissions from each of the reverberatory furnaces shall not exceed 24.0 pounds per hour when operating at a process weight rate of 14.0 tons of per hour.
- (b) The particulate matter (PM) emissions from rotary furnace M shall not exceed 13.6 pounds per hour when operating at a process weight rate of 6.0 tons per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.1.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their baghouses. If the OM&M plan required by condition D.1.6 is developed in accordance with Section B- Preventive Maintenance Plans, then after the OM&M plan has been approved, it shall satisfy the requirements of this condition.

### Compliance Determination Requirements

#### D.1.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63 Subpart RRR]

- (a) In order to demonstrate compliance with 40 CFR Part 63 Subpart RRR, 40 CFR 52.21, and 326 IAC 2-2, the Permittee shall, within 180 days after startup, perform PM and PM10 testing on baghouses E, F, and N, and NO<sub>x</sub>, HCl, and D/F testing on reverberatory furnaces #1, #2, #4, and Rotary furnace M, using methods as approved by the Commissioner, in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. When testing baghouses E and F, reverberatory furnaces #1 and #2 shall be operated at 95% or more of their maximum design capacities. When testing baghouse N, the rotary furnace N and reverberatory furnace #4 shall be operated at 95% or more of its maximum design capacity. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C- Performance Testing. These tests shall be repeated every two and one-half (2.5) years.
- (b) The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. The Permittee may use existing data in addition to the results of the performance test to establish operating parameter values for compliance monitoring provided the requirements of 40 CFR 63.1511(g) are met [63.1511(g)].

#### D.1.10 Particulate Matter (PM) and Capture/Collection Systems [40 CFR 63.1506(c)]

Pursuant to CP-003-9243-00286, issued on May 1, 1998, Source Modification 003-11927-00286, issued on June 7, 2000, and in order to comply with Conditions D.1.1, D.1.3, D.1.5, and D.1.7, the capture/control system (baghouses) for PM control shall be in operation and control emissions from the furnaces at all times that the furnaces are in operation according to the procedures and requirements of the OM&M plan. Baghouse L for PM control shall be in operation and control emissions from furnace #3 at all times when furnace #3 is in operation. Baghouse N for PM control shall be in operation and control emissions from the rotary furnace and furnace #4 at all times when the furnaces are in operation. It is acceptable to operate only one of the baghouses E or F if only one of the two reverberatory furnaces #1 and #2 is operating. If both reverberatory furnaces #1 and #2 are operating, then both baghouses E and F must be operated.

#### D.1.11 Feed/Charge Determination [40 CFR 63.1506(d)]

Pursuant to 40 CFR 63.1506, the Permittee shall install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test. The Permittee shall operate each measurement system or other weight determination procedure in accordance with the Operation, Maintenance, and Monitoring Plan. Alternatively, the Permittee may choose to measure and record aluminum production weight from an affected emission unit rather than feed/charge weight provided that the aluminum production weight is measured for all emission



units within a secondary aluminum processing unit and all calculations to demonstrate compliance with the emission limits for secondary aluminum processing units are based on aluminum production weight rather than feed/charge weight.

D.1.12 Secondary Aluminum Smelting Compliance Determination [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1510, the following conditions shall apply to reverberatory furnaces #1, #2, #3, #4, and rotary furnace M:

- (a) For each furnace, the Permittee shall [63.1506(m)]:
  - (1) Initiate corrective action within one (1) hour of a bag leak detection system alarm; complete the corrective action procedures in accordance with the Operation, Maintenance, and Monitoring Plan; and operate each fabric filter system such that the bag leak detection system alarm does not sound more than five (5) percent of the operating time during a six (6) month reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the Permittee takes longer than one (1) hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the Permittee to initiate corrective action.
  - (2) Maintain the three (3) hour average inlet temperature for each fabric filter at or below the average temperature established during the performance test plus 25 degrees F.
  - (3) For a continuous-lime injection system, the Permittee shall maintain free-flowing alkaline agent in the hopper to the feed device at all times and maintain the alkaline agent feeder setting at the same level established during the performance test. For the purposes of this rule lime means calcium oxide or other alkaline reagent; and lime-injection means the continuous addition of lime upstream of the fabric filter.
  - (4) Maintain the total reactive flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- (b) The Permittee shall use a continuous lime-injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR; and therefore must [40 CFR 63.1510(i)]:
  - (1) Verify that the lime (or other alkaline agent) is always free-flowing by: Inspecting the feed hopper or silo at least once each eight (8) hour period and recording the results of each inspection. If the lime or other alkaline agent is found not to be free-flowing during any of the eight (8) hour periods, the Permittee shall increase the frequency of inspections to at least once every four (4) hour period for the next three (3) days. The Permittee may return to inspections at least once every eight (8) hour period if corrective action results in no further blockages of lime or other alkaline agent during the three (3) day period.
  - (2) The Permittee shall also record the feeder setting once each day of operation.
- (c) Pursuant to 40 CFR 63.1510(j), for all furnaces at this source, the Permittee shall [40 CFR 63.1510(j)]:

- (1) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or reactive liquid flux injected into each furnace. The monitoring system must record the weight for each fifteen (15) minute period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test. The accuracy of the weight measurement shall be within one (1) percent of the weight of the reactive component of the flux being measured. The Permittee may apply to IDEM, OAQ to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of within one (1) percent accuracy impracticable. The Permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six (6) months.
  - (2) Calculate and record the flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
  - (3) Record, for each fifteen (15) minute time period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of reactive flux.
  - (4) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test.
- (d) An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information [40 CFR 63.1510(s)(1)]:
- (1) The identification of each emission unit in the secondary aluminum processing unit;
  - (2) The specific control technology of pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
  - (3) The emission limit calculated for each secondary aluminum processing unit and performance test result with supporting calculations demonstrating initial compliance with each applicable emission limit;
  - (4) Information and data demonstrating compliance for each emission unit with all applicable design equipment work practice or operational standards of Subpart RRR; and
  - (5) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40 CFR 63.1510(t).
- (e) The SAPU compliance procedures within the OM&M plan may not contain any of the information provided in 40 CFR 63.1510(s)(2)(i) through (iv). [40 CFR 63.1510(s)(2)]

The completion of the initial performance tests for the secondary aluminum processing units shall be considered to be the date of approval of the Operation, Maintenance and Monitoring Plan by IDEM, OAQ [63.1506(a)(2)].

## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.1.13 Labeling [40 CFR 63.1510(c)]**

The owner or operator shall, for each furnace, inspect the labels required in Condition D.1.4 at least once per calendar month to confirm that the posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

### **D.1.14 Capture/Collection System [63.1510(d)]**

The owner or operator shall, for the furnaces, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.

### **D.1.15 Feed/Charge Determination [40 CFR 63.1510(e)]**

The owner or operator of the furnaces must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from each furnace emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure must be  $\pm 1$  percent of the weight being measured.

### **D.1.16 Fabric Filter Monitoring Requirements [40 CFR 63.1510(f)]**

These requirements apply to the owner or operator of each reverberatory and rotary furnace listed in this section.

- (a) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- (b) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997).
- (c) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (d) The bag leak detection system sensor must provide output of relative or absolute PM loadings.
- (e) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- (f) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- (g) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- (h) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (i) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

- (j) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

#### D.1.17 Fabric Filter Inlet Temperature Monitoring Requirements [40 CFR 63.1510(h)]

- (a) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases entering baghouses E, F, L and N consistent with the requirements for continuous monitoring systems in 40 CFR Part 63, Subpart A.
- (b) The temperature monitoring device must meet each of these performance and equipment specifications:
  - (1) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - (2) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - (3) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

#### D.1.18 Corrective Action [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator shall initiate corrective action. The corrective action taken, shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

#### D.1.19 Compliance Monitoring Requirements [40 CFR 63.1510(t)] [40 CFR 63.1510(u)]

Pursuant to 40 CFR 63, Subpart RRR, on or after the date of the initial performance test is required to be completed, the Permittee shall monitor all emission units and control equipment according to the following requirements [63.1510(a)]:

- (a) The Permittee shall calculate and record the 3-day, 24- hour rolling average emissions of PM, HCl, and D/F for each furnace on a daily basis. To calculate the 3-day, 24-hour rolling average, the Permittee shall:
  - (1) Calculate and record the total weight of material charged to each furnace for each 24-hour day of operation using the feed/charge weight data collected as required under Subpart RRR.
  - (2) To provide emissions for each furnace for the 24-hour period, in pounds: multiply the total feed/charge weight to the furnace or the weight of aluminum produced by the furnace for the 24-hour period, by the emission rate (in lb/ton of feed/charge) for that furnace (as determined during the emission test).

- (3) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.
- (b) As an alternative to the procedures in (a)(1) above, the Permittee may demonstrate through performance tests, that each individual furnace is in compliance with the applicable emission limit [40 CFR 63.1510(u)].

#### D.1.20 Parametric Monitoring

---

The Permittee shall record the total static pressure drop across baghouses E, F, L, and N, used in conjunction with the furnaces, at least once per shift when any of the furnaces are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.1.21 Baghouse Inspections

---

An inspection shall be performed each calendar quarter of all bags controlling the furnaces when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

#### D.1.22 Broken or Failed Bag Detection

---

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

## **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.1.23 Record Keeping Requirements**

---

- (a) To document compliance with D.1.1, the Permittee shall maintain records of the total scrap aluminum and flux charged to each reverberatory furnace for each 12 consecutive month period.
- (b) To document compliance with Condition D.1.20, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation when venting to the atmosphere
- (c) To document compliance with Condition D.1.21, the Permittee shall maintain records of the results of the inspections required under Condition D.1.21.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.24 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]**

---

Pursuant to 40 CFR Part 63.1517 the owner or operator shall:

- (a) As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.
- (b) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (c) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (d) In addition to the general records required by 40 CFR 63.1510(b), the owner or operator of a furnace with a lime-injected fabric filter must maintain records of:
  - (1) The number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
  - (2) The following regarding lime injection:

Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;
  - (3) For each group 1 furnace at this source, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection

rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.

- (4) For each continuous monitoring system, records required by 40 CFR 63.10(c).
- (5) For each furnace, weights for each operating cycle or time period used in the performance test.
- (6) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (7) Records of annual inspections of emission capture/collection and closed vent systems.
- (8) Records for any approved alternative monitoring or test procedure.
- (9) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
  - (i) Startup, shutdown, and malfunction plan;
  - (ii) For major sources, OM&M plan; and
  - (iii) Site-specific secondary aluminum processing unit emission plan.
- (10) For each furnace, records of total charge weight for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

**D.1.25 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR]**

Pursuant to 40 CFR 63.1510 and 63.1516 the owner or operator shall:

- (a) Submit initial notifications, upon startup, to the applicable permitting authority as described below.
  - (1) The owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.
  - (2) The owner or operator must provide additional notifications for sources with continuous emission monitoring systems.
- (b) Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier

submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

- (1) All information required in 40 CFR 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
  - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system.
  - (3) Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.
  - (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
  - (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c).
  - (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).
  - (7) Approved OM&M plan.
  - (8) Startup, shutdown, and malfunction plan, with revisions.
- (c) The owner or operator must develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
- (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
  - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (d) The owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.



A report must be submitted if any of these conditions occur during a 6-month reporting period:

- (1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
  - (2) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
  - (3) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
  - (4) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of Subpart RRR.
  - (5) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
- (e) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.
- (f) For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
- (1) Any period of excess emissions, as defined the semiannual report, that occurred during the year were reported as required by this subpart; and
  - (2) All monitoring, Record keeping, and reporting requirements were met during the year.

#### D.1.26 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Scrap Shredder

- (c) One (1) Scrap Shredder, identified as unit C, constructed in 1998, with a maximum capacity of 25,000 pounds aluminum scrap per hour, with emissions controlled by fabric filter baghouse C (exhausting indoors).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to CP 003-9243-00286, issued on May 1, 1998, and in order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, particulate matter (PM) and PM10 emissions shall not exceed the allowable emission rate of 0.338 pounds per hour.

#### D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the shredder except when otherwise specified in 40 CFR Part 63, Subpart RRR.

#### D.2.3 Secondary Aluminum Production Limits [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR 63.1505, the owner or operator of a Scrap Shredder shall not discharge or cause to be discharged to the atmosphere PM emissions in excess of 0.01 grains per dry standard cubic foot (gr/dscf).

The Permittee shall be in compliance with the emission limitations and operating requirements by March 24, 2003.

#### D.2.4 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to CP 003-9243-00286, issued on May 1, 1998, and 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the baghouse controlling the shredder shall not exceed 22.27 pounds per hour when operating at a process weight rate of 12.5 tons of metal per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### D.2.5 Labeling [40 CFR Part 63.1506(b)]

The owner or operator shall provide and maintain easily visible labels that shall be posted at the Scrap Shredder. Said labels shall identify the applicable emission limits and means of compliance, including:

- (a) the type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer); and

- (b) the applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

#### D.2.6 Capture and Control Systems [40 CFR Part 63.1506(c)]

Pursuant to 40 CFR 63.1506(c), the owner or operator of the Scrap Shredder must:

- (a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference: 40 CFR 63.1502)
- (b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- (c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

#### D.2.7 Operation, Maintenance, and Monitoring (OM&M) Plan [63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator must submit the plan to the applicable permitting authority for review and approval as part of the application for a part 70 or part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (b) A monitoring schedule for each affected source and emission unit.
- (c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in §63.1505.
- (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - (1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - (2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.
- (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

- (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:
  - (1) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

**D.2.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse. If the OM&M plan required by condition D.2.7 is developed in accordance with Section B- Preventive Maintenance Plans, then after the OM&M plan has been approved, it shall satisfy the requirements of this condition.

**Compliance Determination Requirements**

**D.2.9 Particulate Matter (PM) and Capture/Collection Systems [40 CFR 63.1506(c)]**

Pursuant to CP-003-9243-00286, issued on May 1, 1998, 40 CFR 63.1506(c), and in order to comply with Conditions D.2.1, D.2.3, and D.2.4, the capture/control system (baghouse) for PM control shall be in operation and control emissions from the Scrap Shredder at all times that the shredder is in operation according to the procedures and requirements of the OM&M plan.

**D.2.10 Secondary Aluminum Compliance Determination [40 CFR Part 63, Subpart RRR]**

Pursuant to 40 CFR Part 63.1506(e), the owner operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system. Therefore, the owner or operator must:

- (a) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.
- (b) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

**D.2.11 Labeling [40 CFR 63.1510(c)]**

The owner or operator shall, for the Scrap Shredder, inspect the labels required in Condition D.2.5 at least once per calendar month to confirm that the posted labels are intact and legible.

**D.2.12 Capture/Collection System [63.1510(d)(2)]**

The owner or operator shall, for the Scrap Shredder, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Condition D.2.6 and record the results of each inspection.

#### D.2.13 Monitoring Requirements [40 CFR 63.1510(f)]

---

- (a) These requirements apply to the owner or operator of the scrap shredder:
- (1) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
  - (2) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
  - (3) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
  - (4) The bag leak detection system sensor must provide output of relative or absolute PM loadings.
  - (5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
  - (6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
  - (7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
  - (8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
  - (9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
  - (10) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

#### D.2.14 Parametric Monitoring

---

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the scrap shredder at least once per shift when the shredder is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.2.15 Baghouse Inspections

An inspection shall be performed each calendar quarter of the bags controlling the shredder when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.2.16 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### D.2.17 Corrective Action [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator shall initiate corrective action. The corrective action taken, shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

### **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### D.2.18 Record Keeping Requirements

- (a) To document compliance with Condition D.2.14, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation when venting to the atmosphere.
- (b) To document compliance with Condition D.2.15, the Permittee shall maintain records of the results of the inspections required under Condition D.2.15 and the dates the vents are redirected.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.2.19 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]**

---

Pursuant to 40 CFR Part 63.1517 the owner or operator shall:

- (a) As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.
- (b) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (c) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (d) In addition to the general records required by 40 CFR 63.1510(b), the owner or operator of a scrap shredder with emissions controlled by a baghouse must maintain records of:
  - (1) The number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
  - (2) Records required by 40 CFR 63.10(c) for each continuous monitoring system.
  - (3) Feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.
  - (4) Monthly inspections for proper unit labeling subject to labeling requirements.
  - (5) Annual inspections of emission capture/collection and closed vent systems.
  - (6) Any approved alternative monitoring or test procedure.
  - (7) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
    - (i) Startup, shutdown, and malfunction plan;
    - (ii) For major sources, OM&M plan; and
    - (iii) Site-specific secondary aluminum processing unit emission plan (if applicable).

**D.2.20 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR]**

---

Pursuant to 40 CFR 63.1510 and 63.1516 the owner or operator shall:

- (a) Submit initial notifications to the applicable permitting authority as described below.

- (1) The owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.
  - (2) The owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.
- (b) Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section.
  - (1) All information required in 40 CFR 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
  - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
  - (3) Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.
  - (4) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in §63.1506(c).
  - (5) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).
  - (6) Startup, shutdown, and malfunction plan, with revisions.
- (c) The owner or operator must develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
  - (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
  - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.



- (d) The owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

A report must be submitted if any of these conditions occur during a 6-month reporting period:

- (1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
  - (2) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, or other approved operating parameter).
  - (3) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
  - (4) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of Subpart RRR.
- (e) For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
- (1) Any period of excess emissions, as defined the semiannual report, that occurred during the year were reported as required by this subpart; and
  - (2) All monitoring, record keeping, and reporting requirements were met during the year.

## SECTION D.3

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Scrap Dryer

- (d) One (1) Scrap Dryer, identified as unit D, constructed in 1998, with a maximum drying capacity of 12,000 pounds aluminum scrap per hour and 6 MMBtu/hr, with emissions controlled by fabric filter baghouse D with manual lime injection and a 12 MMBtu/hr afterburner, and exhausting to stack D.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2][40 CFR 52.21]

Pursuant to CP 003-9243-00286, issued on May 1, 1998, and in order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the particulate matter (PM) and PM10 emissions shall not exceed the allowable emission rate of 4.188 pounds per hour.

#### D.3.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the shredder except when otherwise specified in 40 CFR Part 60, Subpart RRR.

#### D.3.3 Secondary Aluminum Production Limits [40 CFR Part 63.1505] [40 CFR Part 63.1506]

The scrap dryer is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 63 Subpart RRR. The owner or operator of a scrap dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of:

- (1) 0.08 pounds of particulate matter (PM) per ton of feed/charge.
- (2) 0.80 pounds of hydrochloric acid (HCl) per ton of feed/charge.
- (3) 0.25 micrograms total polychlorinated dibenzofurans (D/F) international Toxicity Equivalent (TEQ) per megagram ( $3.5 \times 10^{-6}$  gr per ton) of feed/charge.
- (4) 0.06 pounds THC (Total Hydrocarbon) per ton of feed/charge.

The Permittee shall be in compliance with the emission limitations and operating requirements by March 24, 2003.

#### D.3.4 Labeling [40 CFR 63.1506(b)]

On or after the date of approval of the Operation, Maintenance and Monitoring Plan, the Permittee shall provide and maintain easily visible labels posted at the Scrap Dryer. Said labels shall identify the applicable emission limits and means of compliance, including:

- (a) The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln);
- (b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes the applicable operating parameter ranges and requirements as incorporated in the OM&M plan; and
- (c) The afterburner operating temperature and design residence time.

**D.3.5 Feed/Charge Determination [40 CFR 63.1506(d)]**

---

The Permittee shall install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test. The Permittee shall operate each measurement system or other weight determination procedure in accordance with the Operation, Maintenance, and Monitoring Plan. Alternatively, the Permittee may choose to measure and record aluminum production weight from an affected emission unit rather than feed/charge weight provided that the aluminum production weight is measured for all emission units within a secondary aluminum processing unit and all calculations to demonstrate compliance with the emission limits for secondary aluminum processing units are based on aluminum production weight rather than feed/charge weight.

**D.3.6 Capture and Control Systems [40 CFR 63.1506(c)][40 CFR 63.1510(d)]**

---

Pursuant to 40 CFR 63.1506(c), the owner or operator of Scrap Dryer must:

- (a) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart)
- (b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- (c) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

**D.3.7 Operation, Maintenance, and Monitoring (OM&M) Plan [40 CFR 63.1510(b)]**

---

The owner or operator must prepare and implement for the scrap dryer, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator must submit the plan to the applicable permitting authority for review and approval as part of the application for a part 70 or part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (b) A monitoring schedule for the dryer.
- (c) Procedures for the proper operation and maintenance of the dryer and each add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - (1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - (2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.

- (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:
  - (1) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

#### D.3.8 BACT (Best Available Control Technology) Condition

- (a) Pursuant to CP 003-9243-00286 on May 1, 1998, and 326 IAC 8-1-6, the afterburner, determined to be the best available control technology, shall be operated at all times that the Scrap Dryer is in operation. When operating, the afterburner must maintain a minimum VOC capture efficiency of ninety-nine percent (99%) and a minimum VOC destruction efficiency of ninety-nine percent (99%). Compliance with this requirement will render 326 IAC 2-2 and 40 CFR 52.21 not applicable.
- (b) From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the afterburner at or above the hourly average temperature of 1,300 degrees Fahrenheit.
- (c) The Permittee shall determine temperature and fan amperage from the most recent valid stack test that demonstrates compliance with limits in (a) of this condition, as approved by IDEM.
- (d) On or after the date the approved stack test results are available, the Permittee shall operate the afterburner at or above the average temperature, residence time, and airflow as observed during the compliant stack test.

#### D.3.9 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the dryer shall not exceed 13.62 pounds per hour when operating at a process weight rate of 6 tons of metal per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.3.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse. If the OM&M plan required by condition D.3.7 is developed in accordance with Section B- Preventive Maintenance Plans, then after the OM&M plan has been approved, it shall satisfy the requirements of this condition.

## Compliance Determination Requirements

### D.3.11 Fabric Filter Compliance Requirements [40 CFR 63.1506(c)]

Pursuant to CP-003-9243-00286, issued on May 1, 1998, 40 CFR 63.1506(c), and in order to comply with conditions D.3.1, D.3.3, and D.3.9, the owner or operator shall operate fabric filter baghouse at all times the respective dryer is in operation, in accordance with the OM&M plan. The owner or operator must:

- (1) Install, calibrate, maintain, and continuously operate a bag leak detection system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period.
- (2) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14°C (plus 25°F)

### D.3.12 Afterburner Compliance Requirements [40 CFR 63.1506(g)]

Pursuant to CP-003-9243-00286, issued on May 1, 1998, 40 CFR 63.1506(g) and in order to comply with condition D.3.8, the owner or operator shall operate the afterburner, determined to be the best available control technology (BACT), at all times the respective dryer is in operation, in accordance with the OM&M plan. For the afterburner, the owner or operator must:

- (1) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test
- (2) Operate each afterburner in accordance with the OM&M plan.

### D.3.13 VOC Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within forty-eight (48) months after issuance of this permit, the Permittee shall perform VOC testing on the Scrap Dryer utilizing methods as approved by the Commissioner to ensure compliance with Condition D.3.8 (326 IAC 8-1-6). This test shall be repeating at least once every five years from the date of this valid compliance demonstration.

## Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

### D.3.14 Labeling [40 CFR 63.1510(c)]

The owner or operator shall, for the Scrap Dryer, inspect the labels required in Condition D.3.4 at least once per calendar month to confirm that the posted labels are intact and legible.

### D.3.15 Capture/Collection System [40 CFR 63.1510(d)(2)]

The owner or operator shall, for the Scrap Dryer, inspect each capture/collection and closed vent system associated with the dryer at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Conditions D.3.6 and D.3.10 and record the results of each inspection.

### D.3.16 Feed/Charge Determination [40 CFR 63.1510(e)]

The owner or operator of the dryer must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the dryer over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure must be  $\pm 1$  percent of the weight being measured.

### D.3.17 Fabric Filter Monitoring Requirements [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of the scrap dryer using a fabric filter with a bag leak detection system.

- (a) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- (b) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997).
- (c) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (d) The bag leak detection system sensor must provide output of relative or absolute PM loadings.
- (e) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- (f) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- (g) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- (h) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (i) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- (j) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

**D.3.18 Afterburner Monitoring Requirements [40 CFR 63.1510(g)]**

The owner or operator of an affected source using an afterburner for control shall:

- (a) Install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements of continuous monitoring systems in 40 CFR Part 63 Subpart A.
- (b) The temperature monitoring device must:
  - (1) Be installed at the exit of each afterburner's combustion zone.
  - (2) Record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.
  - (3) Have a recorder response range including zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(m).

- (4) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- (c) Conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:
  - (1) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;
  - (2) Inspection for proper adjustment of combustion air;
  - (3) Inspection of internal structures (e.g., baffles) to ensure structural integrity;
  - (4) Inspection of dampers, fans, and blowers for proper operation;
  - (5) Inspection for proper sealing;
  - (6) Inspection of motors for proper operation;
  - (7) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;
  - (8) Inspection of afterburner shell for corrosion and/or hot spots;
  - (9) Documentation verifying that, for the burn cycle following the inspection, the afterburner is operating properly and all necessary adjustments have been made;
  - (10) Verification that the equipment is maintained in good operating condition.
  - (11) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.

D.3.19 Fabric Filter Inlet Temperature Monitoring Requirements [40 CFR 63.1510(h)]

- (a) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in 40 CFR Part 63, Subpart A.
- (b) The temperature monitoring device must meet each of these performance and equipment specifications:
  - (1) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - (2) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - (3) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

D.3.20 Corrective Action for 40 CFR 63, Subpart RRR [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator shall initiate corrective action.

The corrective action taken, shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

#### D.3.21 Parametric Monitoring

---

- (a) The Permittee shall record the total static pressure drop across the baghouses D used in conjunction with the scrap dryer, at least once per shift when the dryer is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.3.22 Baghouse Inspections

---

An inspection shall be performed each calendar quarter of all bags controlling the scrap dryer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

#### D.3.23 Broken or Failed Bag Detection

---

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions). Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).



## **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.3.24 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]**

---

Pursuant to 40 CFR Part 63.1517 the owner or operator shall:

- (a) As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.
- (b) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (c) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (d) In addition to the general records required by 40 CFR 63.1510(b), the owner or operator of a scrap dryer must maintain records of:
  - (1) The number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
  - (2) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:
    - (i) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;
    - (ii) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken; and
    - (iii) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in 40 CFR 63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).
  - (3) 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the

compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and annual afterburner inspections.

- (4) 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken
- (5) For each continuous monitoring system, records required by 40 CFR 63.10(c).
- (6) Feed charge (or throughput) weights for each operating cycle or time period used in the performance test.
- (7) Monthly inspections for proper unit labeling subject to labeling requirements.
- (8) Annual inspections of emission capture/collection and closed vent systems.
- (9) Any approved alternative monitoring or test procedure.
- (10) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
  - (i) Startup, shutdown, and malfunction plan;
  - (ii) For major sources, OM&M plan; and
  - (iii) Site-specific secondary aluminum processing unit emission plan (if applicable).

#### D.3.25 Record Keeping Requirements

- (a) To document compliance with Condition D.3.21, the Permittee shall maintain records of the inlet and outlet differential static pressure once per shift during normal operation when venting to the atmosphere:
- (b) To document compliance with Condition D.3.22, the Permittee shall maintain records of the results of the inspections required under Condition D.3.22 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.3.26 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR 63.1510 and 63.1516 the owner or operator shall:

- (a) Submit initial notifications to the applicable permitting authority as described below.
  - (1) The owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.
  - (2) The owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

- (b) Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:
- (1) All information required in 40 CFR 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
  - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
  - (3) Unit labeling as described in 40 CFR 63.1506(b), including process type or classification and operating requirements.
  - (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
  - (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c).
  - (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).
  - (7) Approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
  - (8) Startup, shutdown, and malfunction plan, with revisions.
- (c) The owner or operator must develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
- (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

- (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (d) The owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

A report must be submitted if any of these conditions occur during a 6-month reporting period:

- (1) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
  - (2) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
  - (3) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
  - (4) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of Subpart RRR.
- (e) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.
- (f) For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
  - (1) Any period of excess emissions, as defined the semiannual report, that occurred during the year were reported as required by this subpart; and
  - (2) All monitoring, record keeping, and reporting requirements were met during the year.

## SECTION D.4

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

- (a) Cleaners and solvents characterized as follows: A) having a vapor pressure equal to or less than 2kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 degrees F) or; B) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 degrees C (68 degrees F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2]
- (i) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### D.4.2 Particulate Matter (PM) Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from the insignificant welding, soldering, and brazing operations, which has a maximum process weight rate less than 100 pounds per hour, shall not exceed 0.551 pounds per hour.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Responsible Official:	CEO & President
Source Name:	Superior Aluminum Alloys
Source Address:	14214 Edgerton Road
Mailing Address:	P O Box 678, New Haven, IN 46774
Part 70 Permit No.:	T003-11452-00286

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) \_\_\_\_\_

9 Report (specify) \_\_\_\_\_

9 Notification (specify) \_\_\_\_\_

9 Affidavit (specify) \_\_\_\_\_

9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH**

**P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Responsible Official: CEO & President  
Source Name: Superior Aluminum Alloys  
Source Address: 14214 Edgerton Road  
Mailing Address: P O Box 678, New Haven, IN 46774  
Part 70 Permit No.: T003-11452-00286

**This form consists of 2 pages**

**Page 1 of 2**

- 9** This is an emergency as defined in 326 IAC 2-7-1(12)
- ☐ The Permittee must notify the Office of Air Quality (OAQ), within four **(4)** business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
  - ☐ The Permittee must submit notice in writing or by facsimile within two **(2)** days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Responsible Official: CEO & President  
Source Name: Superior Aluminum Alloys  
Source Address: 14214 Edgerton Road  
Mailing Address: P O Box 678, New Haven, IN 46774  
Part 70 Permit No.: T003-11452-00286  
Facility: Four Reverberatory Furnaces (Furnaces #1 through #4)  
Parameter: Amount of flux material fed to each furnace  
Limit: 11,205,135 pounds per twelve consecutive month period

YEAR: \_\_\_\_\_

Month	Column 1				Column 2				Column 1 + Column 2			
	This Month				Previous 11 Months				12 Month Total			
	#1	#2	#3	#4	#1	#2	#3	#4	#1	#2	#3	#4
Month 1												
Month 2												
Month 3												

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Responsible Official: CEO & President  
Source Name: Superior Aluminum Alloys  
Source Address: 14214 Edgerton Road  
Mailing Address: P O Box 678, New Haven, IN 46774  
Part 70 Permit No.: T003-11452-00286  
Facility: Four Reverberatory Furnaces (Furnaces #1 through #4)  
Parameter: Total amount of scrap aluminum fed/charged  
Limit: 300,000,000 pounds per twelve consecutive month period

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Responsible Official: CEO & President  
Source Name: Superior Aluminum Alloys  
Source Address: 14214 Edgerton Road  
Mailing Address: P O Box 678, New Haven, IN 46774  
Part 70 Permit No.: T003-11452-00286

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management  
Office of Air Quality**

**Addendum to the  
Technical Support Document for a Part 70 Operating Permit**

**Source Background and Description**

Source Name: Superior Aluminum Alloys, L.L.C.  
Source Location: 14214 Edgerton Road, New Haven, IN 46774  
County: Allen  
SIC Code: 3341  
Operation Permit No.: T003-11452-00286  
Permit Reviewer: ERG/BS

On January 8, 2002, the Office of Air Quality (OAQ) had a notice published in the Ft. Wayne Journal Gazette, Fort Wayne, Indiana, stating that Superior Aluminum Alloys, LLC had applied for a Part 70 Operating Permit to operate a secondary aluminum production plant. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On February 4, 2002, a member of the public, Stephen Loeschner, provided comments on the proposed Part 70 permit. The following is a summary of the comments and responses to those comments including any changes to the permit. The Table Of Contents has been modified, if applicable, to reflect these changes.

**Comment 1:**

What was the highest melt rate capacity ever met at the plant? What is the history of hydrogen chloride tests in term of pounds HCl per hour and per ton of scrap aluminum processed?

**Response to Comment 1:**

Superior Aluminum Alloys never furnished IDEM, OAQ with the highest melt rate ever experienced by the plant. The highest melt rate is not necessary for the development of the Part 70 permit as the source's potential-to-emit criteria pollutants were determined based on the maximum capacity of the plant. Preliminary results from emissions testing completed in 2001 on Reverberatory Furnace #3 showed an average emission rate of 0.144 pounds HCl per ton of aluminum processed and 2.5 pounds HCl per hour; a rate in compliance with the NESHAP HCl limit of 0.4 pounds HCl per ton. No changes were made to the permit as a result of this comment.

**Comment 2:**

Please correct Condition D.1.3(a) to correctly indicate that the D/F emission limit is in micrograms per megaton of feed/charge and update the D/F definition reference to 40 CFR 60.2125 (July 2001).

## Response to Comment 2:

The following changes have been made to Condition D.1.3(a) to clarify the D/F emission limit placed on the Group I furnaces located at the source:

- (3) The Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of total tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans (D/F) in excess of:

$$L_{cDF} = \frac{\sum_{i=1}^n (L_{iDF} \times T_i)}{\sum_{i=1}^n T_i}$$

where  $L_{iDF}$  = The D/F emission limit for individual emission unit in the secondary aluminum processing unit; and  
 $L_{cDF}$  = The D/F emission limit for secondary aluminum processing unit.

The D/F emission limit ( $L_{cDF}$ ) for a Group 1 furnace without an in-line fluxer (Reverberatory Furnaces #1 through #4 and Rotary Furnace M) at a secondary aluminum production facility shall be 15 **micrograms** ~~Fg~~ of D/F TEQ per **megagram** ~~Mg~~ ( $2.1 \times 10^{-4}$  gr of D/F TEQ per ton) ~~per ton of feed/charge or per ton of aluminum produced~~. Where TEQ is the toxicity equivalents for dioxins and furans as defined in **40 CFR 60.2125 (July 2001)** in ~~"Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update"~~. [40 CFR 63.1505(i)][40 CFR 63.1505(k)]

## Comment 3:

What is the detailed mathematical derivation of the source's 217 tons HCl per year listed on page 5 of the Technical Support Document?

## Response to Comment 3:

Each reverberatory furnace has a maximum potential to emit 30 tons per year of HAPs, before controls or limits; of which 29 tons per year is estimated to be HCl. The rotary furnace and scrap dryer have a maximum potential to emit of 12.3 tons per year HCl and 84.1 tons per year HCl, respectively, before controls or limits. These emission estimates were determined by multiplying the respective unit's aluminum processing capacity by the appropriate uncontrolled emission factors from a test report by the EPA for draft NESHAPs. Therefore, the source's aggregate potential to emit HCl, before controls or limits, is equal to: [29 (tons HCl per year per reverberatory furnace) x 4 (reverberatory furnaces)] + 13 (tons HCl per year from the rotary furnace) + 84 (tons HCl per year from the dryer) = 213 tpy HCl. The 217 tpy figure listed in the TSD should read 213 tpy HCl.

The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. No changes were made to the permit or TSD as a result of this comment.

**Comment 4:**

Page 4 of the TSD indicates that there are no enforcement actions pending against the source. However, pg. 8 of Appendix A states that the afterburner, used to control VOC emissions from the Scrap Dryer, has an overall efficiency of 98.4% (based on compliance testing completed in 2000) while BACT requires the afterburner, as stated in the permit, operate with an overall efficiency of 99%. If this is true, why aren't there any enforcement actions pending?

**Response to Comment 4:**

The 98.4% efficiency cited on page 8 of Appendix A of the Technical Support Document was erroneously provided by the source. Compliance testing, completed in 2000, showed that the afterburner, used to control VOC emissions from the Scrap Dryer, provides an overall efficiency greater than 99%. As a result, no enforcement actions are pending against the source.

The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. No changes were made to the permit or TSD as a result of this comment.

**Comment 5:**

PM, VOC, NOx, and HCl tests should be done on all furnaces and the Scrap Dryer no less frequently than annually. Additionally, as the incremental cost is very small, CO tests should be done on all furnaces and the Scrap Dryer (including the afterburner) not less frequently than quarterly.

**Response to Comment 5:**

Pursuant to 40 CFR 63.1511(e), the owner or operator of a new or existing source subject to the 40 CFR Part 63 Subpart RRR must conduct a performance test of the regulated pollutants at least once every five (5) years following the initial performance test. According to IDEM, OAQ guidelines, compliance tests on scrap furnaces and chip dryers must be conducted every two and one-half (2.5) years. The source conducted compliance testing (in 2000) on the scrap dryer for PM and VOC, and (in 2001) on reverberatory furnace #3 for PM, NOx, HCl, dioxins/furans, and opacity. Preliminary results from the testing indicate compliance with all applicable limitations. Carbon monoxide is not regulated by 40 CFR Part 63 Subpart RRR and the source is not subject to 326 IAC 9. The combined scrap aluminum input to the reverberatory furnaces is limited to 300,000,000 pounds per twelve consecutive month period. This restriction limits the carbon monoxide emissions to less than 40 tons per year; significantly less than the respective major source emission threshold for PSD. As a result, there is no basis on which to require compliance testing for carbon monoxide. Quarterly testing is not required by any state or federal regulations and would be an unnecessary and excessive burden on the source - a test (on a single facility) for PM, VOC, NOx, HCl, and CO would likely cost between \$10,000 and \$12,000. No changes were made to the permit as a result of this comment.

**Comment 6:**

I request that IDEM, require the purchase, installation, calibration, and certification of continuous emission monitors (CEMs) for HCl on all stacks where normal operation is expected to produce dry, raw HCl concentration of at least two (2) parts per million by volume. The monitors are requested to provide mass per unit time and the associated computational recording equipment is to provide a rolling 365 day aggregate emissions summary. I base my request on the language contained in the EPA October 1990 New Source Review Workshop Manual, while it principally applies to major PSD sources, regarding continuous quantitative measurements and

their infeasibility. I believe that if CEMs are not installed, there is a technical burden on IDEM to show their infeasibility.

**Response to Comment 6:**

The discussion about CEMs in the NSR manual pertains to permits issued under the requirements of PSD. This source is not required to comply with PSD because emissions are limited to less than PSD applicability levels. The NESHAP, 40 CFR Part 63 Subpart RRR, is the only applicable regulation that applies to HCl. The provisions of 40 CFR 63.1510(t) and 63.1510(u) state that compliance monitoring shall be performed by "multiply(ing) the total feed/charge weight to the furnace or the weight of aluminum produced by the furnace for the 24-hour period, by the emission rate (in lb/ton of feed/charge) for that furnace (as determined during the emission test)." These monitoring requirements are sufficient to show compliance with the NESHAP as specified by the NESHAP. No changes were made to the permit as a result of this comment.

On February 6, 2002, Superior Aluminum Alloys provided comments on the proposed Part 70 permit. The following is a summary of the comments and responses to those comments including any changes to the permit. The Table Of Contents has been modified, if applicable, to reflect these changes.

**Comment 1:**

Superior Aluminum Alloys requests that Conditions D.2.5, D.2.10, D.2.11, D.2.13, and D.2.14 be removed from the permit as the baghouse that controls emissions from the scrap shredder exhausts indoors and therefore can not exhaust to the atmosphere.

**Response to Comment 1:**

IDEM recognizes, as indicated in the permit, that the baghouse controlling emissions from the Scrap Shredder exhausts indoors. However, 40 CFR Part 63 Subpart RRR clearly states that the "owner and operator of a scrap shredder" shall comply with the requirements listed therein. At no point in the rule does it include an exemption for sources that do not exhaust directly to the atmosphere. No changes were made as a result of this comment.

**Comment 2:**

Superior Aluminum Alloys understands that Conditions D.3.4, D.3.11, D.3.14, D.3.17, and D.3.19 are not required until March 24, 2003.

**Response to Comment 2:**

The source is not required to comply with the 40 CFR Part 63 Subpart RRR requirements outlined in section D.3 of the permit until March 24, 2003- as stated in Condition in D.3.3 of this permit. No changes were made to the permit as a result of this comment.

**Comment 3:**

The Scrap Dryer exhausts to only one stack; stack D. Please correct section A.2 of the permit to reflect this.

**Response to Comment 3:**

The following change was made to correctly state to which stack the Scrap Dryer exhausts.



A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

---

This stationary source consists of the following emission units and pollution control devices:

- (a) Four (4) natural gas-fired Reverberatory Furnaces, identified as furnace #1 (to be constructed ), furnace #2 (to be constructed), furnace #3 (constructed in 2000) and furnace #4 (to be constructed), each with: a maximum capacity of 28,000 pounds of aluminum scrap per hour, chlorine flux of 10,233 pounds per eight-hour charge, and a heat input capacity of 28 MMBtu/hr, emissions controlled by four (4) fabric filter baghouses with lime injection (baghouses E and F are manually lime injected, baghouses L and N are equipped with continuous lime injection), with furnaces #1 and #2 exhausting to stacks E and F, furnace #3 exhausting to stack L, and furnace #4 exhausting to stack N, respectively.
- (b) One (1) natural gas-fired Rotary Furnace, identified as furnace M, to be constructed, with a maximum capacity of 12,000 pounds of aluminum scrap per hour and a maximum heat input capacity of 12 MMBtu/hr, with emissions controlled by fabric filter baghouse N equipped with continuous lime injection, and exhausting to stack N.
- (c) One (1) Scrap Shredder, identified as unit C, constructed in 1998, with a maximum capacity of 25,000 pounds aluminum scrap per hour, with emissions controlled by fabric filter baghouse C (exhausting indoors).
- (d) One (1) Scrap Dryer, identified as unit D, constructed in 1998, with a maximum drying capacity of 12,000 pounds aluminum scrap per hour and 6 MMBtu/hr, with emissions controlled by fabric filter baghouse D with manual lime injection and a 12 MMBtu/hr afterburner, and exhausting to **stack D** ~~stacks D and G~~.

(The same change was made to facility description table in section D.3 of the permit.)

On April 30, 2002, the EPA provided comments on the proposed Part 70 permit. The following is a summary of the comments and responses to those comments including any changes to the permit. The Table Of Contents has been modified, if applicable, to reflect these changes.

**Comment 1:**

Permit CP 003-9243-00286 requires a destruction efficiency of 99% and a capture efficiency of 99%. Please modify Condition D.3.8 to indicate that both the destruction efficiency and capture efficiency are required to be 99%.

**Response to Comment 1:**

The following changes were made to the permit to clarify that the BACT requirement from CP 003-9243-00286, issued on May 1, 1998, mandates a minimum destruction efficiency of 99% and a minimum capture efficiency of 99%:

**D.3.8 BACT (Best Available Control Technology) Condition**

---

Pursuant to CP 003-9243-00286 on May 1, 1998, and 326 IAC 8-1-6, the afterburner, determined to be the best available control technology, shall be operated at all times that the Scrap Dryer is in operation. When operating, the afterburner must maintain a minimum **VOC capture efficiency of 99%, a minimum** VOC destruction efficiency of 99% and a minimum operating temperature of 1300 degrees Fahrenheit, or the temperature, residence time and air flow rate determined in the compliance tests to maintain a minimum 99% destruction of the volatile organic compound (VOC) captured. Compliance with this requirement will render 326 IAC 2-2 and 40 CFR 52.21 not applicable.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. IDEM has revised Condition D.3.8, as follows, to clarify that the afterburner must be operated properly to achieve compliance with the required destruction efficiency. This change is necessary to clarify that the source can not choose to operate the afterburner at 1300 degrees Fahrenheit if compliance testing indicates that the temperature does not achieve the necessary destruction efficiency.

**D.3.8 BACT (Best Available Control Technology) Condition**

---

- (a) Pursuant to CP 003-9243-00286 on May 1, 1998, and 326 IAC 8-1-6, the afterburner, determined to be the best available control technology, shall be operated at all times that the Scrap Dryer is in operation. When operating, the afterburner must maintain a minimum VOC capture efficiency of **ninety-nine percent (99%)** and a minimum VOC destruction efficiency of **ninety-nine percent (99%)**. ~~and a minimum operating temperature of 1300 degrees Fahrenheit, or the temperature, residence time and air flow rate determined in the compliance tests to maintain a minimum 99% destruction of the volatile organic compound (VOC) captured.~~ Compliance with this requirement will render 326 IAC 2-2 and 40 CFR 52.21 not applicable.
- (b) **From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the afterburner at or above the hourly average temperature of 1,300 degrees Fahrenheit.**
- (c) **The Permittee shall determine temperature and fan amperage from the most recent valid stack test that demonstrates compliance with limits in (a) of this condition, as approved by IDEM.**
- (d) **On or after the date the approved stack test results are available, the Permittee shall operate the afterburner at or above the average temperature, residence time, and airflow as observed during the compliant stack test.**

Updates 2 through 6 have been made to incorporate the Article 2 rule revisions that were adopted on October 3, 2001, and became effective on January 19th, 2002. For more information about this rulemaking, refer to the October 2001 Air Pollution Control Board Packet which can be found on the internet at <http://www.state.in.us/idem/air/rules/apcb/packets/index.html>. The rule revisions were published in the February 1, 2002 Indiana Register which can be found on the internet at <http://www.IN.gov/legislative/register/index-25.html>.

2. The new rule cite was added to B.2 Permit Term.

**B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]**

---

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

3. B.12 Emergency Provisions (a), (b) and (g) have been revised to reflect rule changes to 326 IAC 2-7-16. This section of the rule is now consistent with 40 CFR 70.6(g) and provides an affirmative defense to an action brought for non-compliance with technology based emission limitations only.

**B.12 Emergency Provisions [326 IAC 2-7-16]**

---

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, ~~except as provided in 326 IAC 2-7-16.~~

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a ~~health-based or~~ technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (g) ~~Operations may continue during an emergency only if the following conditions are met:~~
  - (1) ~~If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.~~
  - (2) ~~If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:~~
    - (A) ~~The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~
    - (B) ~~Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.~~

~~Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~

- 4. B.14 Multiple Exceedances has been deleted, because 326 IAC 2-7-5(1)(E) has been repealed, because it conflicted with 40 CFR 70.6(a)(6).

~~B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]~~

~~Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.~~

- 5. B.14 (Prior Permits Superseded) was added to the permit to help clarify the intent of the new rule 326 IAC 2-1.1-9.5.

**B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

- (a) **All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either**
  - (1) **incorporated as originally stated,**
  - (2) **revised, or**
  - (3) **deleted****by this permit.**
- (b) **All previous registrations and permits are superseded by this permit.**

- 6. Paragraph (b) has been removed from B.13 (Permit Shield). Since B.14 (Prior Permits Superseded) has been added to the permit, it is not necessary for this statement to be in this condition.

**B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]**

---

- ~~(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.~~

7. The IDEM, OAQ, has revised Condition B.15 Deviations from Permit Requirements and Conditions and certain Parametric Monitoring requirements in Conditions D.1.20, D.2.14, and D.3.21 of the permit to address concerns regarding the independent enforceability of permit conditions [see 40 CFR 70.6(a)(6)(i)]. B.15 was revised to remove language that could be considered to grant exemptions from permit requirements and to clarify reporting obligations.

**B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

---

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~Deviations that are required to be reported by an applicable requirement~~ **A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit**, shall be reported according to the schedule stated in the applicable requirement and ~~do~~ **does** not need to be included in this report.

~~The notification by the Permittee~~ **Quarterly Deviation and Compliance Monitoring Report** does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit ~~or a rule. It does not include:~~
- ~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~
  - ~~(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~
- ~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

**D.1.20 Parametric Monitoring**

---

The Permittee shall record the total static pressure drop across baghouses E, F, L, and N, used in conjunction with the furnaces, at least once per shift when any of the furnaces are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - **Preparation, Implementation, Records, and Reports** ~~Failure to Take Response Steps~~. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - **Preparation, Implementation,**

**Records, and Reports** ~~Failure to Take Response Steps~~, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.1.22 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) **For multi-compartment units**, ~~the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions).~~ Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. ~~Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~ **Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.**
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### D.2.14 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the scrap shredder at least once per shift when the shredder is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - **Preparation, Implementation, Records, and Reports** ~~Failure to Take Response Steps~~. A pressure reading that is outside the above mentioned range is not a deviation from this permit. ~~Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports Failure to Take Response Steps~~, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.2.16 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be

initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance **Response Plan Monitoring Plan - Preparation, Implementation, Records, and Reports** ~~Failure to Take Response Steps~~, shall be considered a violation of this permit.

- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### D.3.21 Parametric Monitoring

---

- (a) The Permittee shall record the total static pressure drop across the baghouses D used in conjunction with the scrap dryer, at least once per shift when the dryer is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - **Preparation, Implementation, Records, and Reports** ~~Failure to Take Response Steps~~. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - **Preparation, Implementation, Records, and Reports** ~~Failure to Take Response Steps~~, shall be considered a violation of this permit.
- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.3.23 Broken or Failed Bag Detection

---

In the event that bag failure has been observed.

- (a) **For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions).** Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. ~~Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~ **Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.**
  - (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
8. The title Compliance Response Plan - Failure to Take Response Steps has been changed to Compliance Response Plan - **Preparation, Implementation, Records, and Reports** in C.16 and throughout the permit.

C.16 Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports** [326 IAC 2-7-5] [326 IAC 2-7-6]

9. Part 70 requires any application form, report, or compliance certification to be certified by the Responsible Official. IDEM, OAQ has revised Condition C.8, Asbestos Abatement Projects, to clarify that the asbestos notification does not require a certification by the responsible official, but it does need to be certified by the owner or operator.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

---

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
- (A) Asbestos removal or demolition start date;
- (B) Removal or demolition contractor; or
- (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

**The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.** The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet

on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

IDEM, OAQ has revised C.17 Actions Related to Noncompliance Demonstrated by a Stack Test; a certification by the responsible official is required for the notification sent in response to non-compliance with a stack test.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

---

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).



## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Part 70 Operating Permit**

#### **Source Background and Description**

Source Name: Superior Aluminum Alloys, L.L.C.  
Source Location: 14214 Edgerton Road, New Haven, IN 46774  
County: Allen  
SIC Code: 3341  
Operation Permit No.: T003-11452-00286  
Permit Reviewer: ERG/BS

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Superior Aluminum Alloys, L.L.C. relating to the operation of a secondary aluminum production plant.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) Four (4) natural gas-fired Reverberatory Furnaces, identified as furnace #1 (to be constructed), furnace #2 (to be constructed), furnace #3 (constructed in 2000) and furnace #4 (to be constructed), each with: a maximum capacity of 28,000 pounds of aluminum scrap per hour, chlorine flux of 10,233 pounds per eight-hour charge, and a heat input capacity of 28 MMBtu/hr, emissions controlled by four (4) fabric filter baghouses with lime injection (baghouses E and F are manually lime injected, baghouses L and N are equipped with continuous lime injection), with furnaces #1 and #2 exhausting to stacks E and F, furnace #3 exhausting to stack L, and furnace #4 exhausting to stack N, respectively.
- (b) One (1) natural gas-fired Rotary Furnace, identified as furnace M, to be constructed, with a maximum capacity of 12,000 pounds of aluminum scrap per hour and a maximum heat input capacity of 12 MMBtu/hr, with emissions controlled by fabric filter baghouse N equipped with continuous lime injection, and exhausting to stack N.
- (c) One (1) Scrap Shredder, identified as unit C, constructed in 1998, with a maximum capacity of 25,000 pounds aluminum scrap per hour, with emissions controlled by fabric filter baghouse C (exhausting indoors).
- (d) One (1) Scrap Dryer, identified as unit D, constructed in 1998, with a maximum drying capacity of 12,000 pounds aluminum scrap per hour and 6 MMBtu/hr, with emissions controlled by fabric filter baghouse D with manual lime injection and a 12 MMBtu/hr afterburner, and exhausting to stack D.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

## Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Twelve melt pot stands, each with two natural gas-fired burners rated at 1.5 MMBtu/hr each, identified as burners #1-24, with uncontrolled emissions.
- (b) Equipment powered by internal combustion engines of capacity equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (d) The following VOC and HAP storage containers: A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons, B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (e) Refractory storage not requiring air pollution control equipment.
- (f) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (h) Cleaners and solvents characterized as follows: A) having a vapor pressure equal to or less than 2kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 degrees F) or; B) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 degrees C (68 degrees F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months. [326 IAC 8-3-2]
- (i) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment cutting torches, soldering equipment, welding equipment.[326 IAC 6-3-2]
- (j) Closed loop heating and cooling systems.
- (k) Any of the following structural steel and bridge fabrication activities: cutting 200,000 linear feet of less of one inch (1") plate or equivalent; using 80 tons or less of welding consumables.
- (l) Noncontact, forced and induced, draft cooling tower system not regulated under a NESHAP.
- (m) Heat exchanger cleaning and repair.
- (n) Repair and replacement of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (o) Process vessel degassing and cleaning to prepare for internal repairs.
- (p) Paved and unpaved roads and parking lots with public access.

- (q) Covered conveyors for limestone conveying of less than or equal to 7,200 pounds per day for sources other than mineral processing plants constructed after August 31, 1983.
- (r) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would no be associated with any production process.
- (s) Flue gas conditioning systems and associated chemicals such as the following: sodium sulfate; ammonia; and sulfur trioxide.
- (t) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (u) On-site fire and emergency response training approved by the department.
- (v) Purge double block and bleed valves.
- (w) Filter or coalescer media changeout.

### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 003-9243-00286, issued May 1, 1998;
- (b) A 003-9779-00286, issued May 24, 1999;
- (c) SSM 003-11927-00286, issued June 7, 2000; and
- (d) Administrative amendment 003-12927-00286, issued January 10, 2001.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (a) CP 003-9243-00286, issued on May 1, 1998:

Condition 11 requires that the Permittee shall record the static pressure drops across the baghouses used in conjunction with the Reverberatory Furnaces #1 and #2, Scrap Dryer and Scrap Shredder once per day.

Reason modified: The static pressure drop across the respective baghouses is required to be recorded once per shift and when venting to the atmosphere, instead of once per day, to clarify, reflect, and be consistent with IDEM guidance regarding monitoring requirements for baghouses.

- (b) SSM 003-11927-00286, issued June 7, 2000:

Condition D.1.1:

- (3) The NOx emissions from furnace #3 charging and melting shall not exceed 3.50 pounds per hour.
- (6) The NOx emissions from reverberatory furnace #4 charging and melting shall not exceed 3.50 pounds per hour.

- (7) The NO<sub>x</sub> emissions from the rotary furnace M shall not exceed 1.5 pounds per hour.

Reason not incorporated:

IDEM has determined that the NO<sub>x</sub> limits were based on inappropriate emission factors which were consequently used to produce PSD Minor limits in SSM 003-11927-00286 that do not sufficiently limit the source to below PSD threshold levels. As a result, these limits are not included in this Part 70 permit. This Title V Part 70 permit includes an aggregate scrap aluminum feed/charge limit for the four reverberatory furnaces to limit the source's NO<sub>x</sub> emissions to less than PSD significance levels. See *State Rule Applicability - Entire Source* of this TSD for more information.

- (b) SSM 003-11927-00286, issued June 7, 2000:

Condition D.1.1:

- (1) The PM emissions from baghouses E, F, and L (controlling furnaces #1, #2, and #3) combined shall not exceed 2.408 pounds per hour.
- (2) The PM<sub>10</sub> emissions from baghouses E, F and L (controlling furnaces #1, #2, and #3) combined shall not exceed 2.408 pounds per hour.
- (4) The PM emissions from baghouse N (controlling reverberatory furnace #4 and rotary furnace M) shall not exceed 1.204 pounds per hour.
- (5) The PM<sub>10</sub> emissions from baghouse N (controlling reverberatory furnace #4 and rotary furnace M) shall not exceed 1.204 pounds per hour.

Reason modified:

These PM and PM<sub>10</sub> limits have been converted to limits on a pound per ton aluminum produced basis to be consistent with the limited aluminum production rate included in this permit.

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on October 18, 1999. Additional information was received May 25, June 5, June 26, and July 20, 2001.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations; see pages 1 through 8.

## Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	13,392
PM-10	7686
SO <sub>2</sub>	41
VOC	2,358
CO	67
NO <sub>x</sub>	110

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Antimony	<1.0
Arsenic	<1.0
Cadmium	<1.0
Chromium	<1.0
Formaldehyde	<1.0
Hydrogen Chloride	217
Hydrogen Fluoride	<1.0
Lead	<1.0
Manganese	<1.0
Mercury	<1.0
Nickel	<1.0
Selenium	<1.0
<b>TOTAL</b>	<b>218.0</b>

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) NO<sub>x</sub> is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions  
 This type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2; the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

## Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2000 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	2
PM-10	2
SO <sub>2</sub>	24
VOC	90
CO	8
NO <sub>x</sub>	35
HAP (specify)	not provided

### Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HCl
Reverberatory Furnaces #1 through #4 <sup>(a)</sup>	7.5 <sup>(b)</sup>	7.5 <sup>(b)</sup>	8.24	63.8	12.6	19.52	98.12 <sup>(e)</sup>
Rotary Furnace M	2.7 <sup>(b)</sup>	2.7 <sup>(b)</sup>	2.94	7.28	6.79	9.46	10.51 <sup>(e)</sup>
12 Melt Pots	1.2	1.2	0.09	0.87	13.25	7.88	0
Scrap Shredder <sup>c</sup>	1.48 <sup>(c)</sup>	1.48 <sup>(c)</sup>	0	0	0	0	0
Scrap Dryer <sup>d</sup> with afterburner	2.1 <sup>(d)</sup>	2.1 <sup>(d)</sup>	11.08	23.3	6.49	31.38	21.0 <sup>(e)</sup>
Fugitive Emissions	0.17	0.03	0	0	0	0	0
<b>Total</b>	<b>15.15</b>	<b>15.01</b>	<b>22.35</b>	<b>95.3</b>	<b>39.13</b>	<b>68.24</b>	<b>129.63</b>

- (a) The combined input of aluminum scrap to reverberatory furnaces #1, #2, #3, and #4 shall not exceed 300,000,000 pounds per 12-consecutive month period. This aluminum feed/charge limit, in combination with the unlimited NO<sub>x</sub> emission rate from the Rotary Furnace and unlimited NO<sub>x</sub> emissions from the Scrap Dryer, Melt Pots, and natural gas combustion from the reverberatory furnaces, will effectively limit the source's potential to emit nitrogen oxides (NO<sub>x</sub>) to less than 100 tons per twelve (12) consecutive month period. The limited potential to emit of SO<sub>2</sub>, VOC, CO, and NO<sub>x</sub> from these furnaces is based on that scrap aluminum feed/charge limit.
- (b) In order to render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable, the PM/PM10 emissions from each furnace are limited to 0.1 pounds per ton of aluminum produced. The equivalent ton per year potential emissions were determined based on the reverberatory furnaces' limited production rate of 300,000,000 pounds per year and the maximum capacity of the Rotary Furnace.
- (c) Pursuant to CP 003-9243-00286, issued on May 1, 1998, the PM emissions from the Scrap Shredder shall not exceed 0.338 pounds per hour.
- (d) Pursuant to 40 CFR Part 63 Subpart RRR, the PM emissions from the Scrap Dryer shall not exceed 0.08 pounds per ton aluminum charged (equivalent to 2.1 tons per year).
- (e) The HCl emissions from these facilities are limited pursuant to 40 CFR Part 63 Subpart RRR.

### County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Allen County has been classified as attainment or unclassifiable for all pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The secondary aluminum production operations are subject to the National Emission Standards for Hazardous Air Pollutants, for Secondary Aluminum Production, 40 CFR 63.1500 (Subpart RRR), 326 IAC 14, and 326 IAC 20-1-1. Pursuant to 40 CFR 63 subpart RRR, and 326 IAC 20-1-1, the secondary aluminum production operations are subject to the following conditions:

#### Emission Limits

- (a) On or after the date of approval of the Operation, Maintenance and Monitoring Plan, the Permittee shall comply with the following emission limitations:
  - (1) The PM emission limit ( $L_{\text{CPM}}$ ) for a Group 1 furnace without an in-line fluxer (each reverberatory furnace and Rotary Furnace M) at a secondary aluminum production facility shall be 0.40 pounds per ton of feed/charge or per ton of aluminum produced. [40 CFR 63.1505(i)][40 CFR 63.1505(k)]
  - (2) The HCl emission limit ( $L_{\text{CHCl}}$ ) for a Group 1 furnace without an in-line fluxer (each reverberatory furnace and Rotary Furnace M) at a secondary aluminum production facility shall be 0.40 pounds per ton of feed/charge or per ton of aluminum produced. [40 CFR 63.1505(i)][40 CFR 63.1505(k)]

- (3) The D/F emission limit ( $L_{CDF}$ ) for a Group 1 furnace without an in-line fluxer ( Reverberatory Furnaces #1 through #4 and Rotary Furnace M) at a secondary aluminum production facility shall be 15 Fg of D/F TEQ per Mg ( $2.1 \times 10^{-4}$  gr of D/F TEQ per ton)per ton of feed/charge or per ton of aluminum produced. Where TEQ is the toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update". [40 CFR 63.1505(i)][40 CFR 63.1505(k)]
- (4) On or after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of the Scrap Shredder shall not discharge or cause to be discharged to the atmosphere PM emissions in excess of 0.01 grains per dry standard cubic foot (gr/dscf).
- (5) On or after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of the Scrap Dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of:
  - (i) 0.08 pounds of particulate matter (PM) per ton of feed/charge.
  - (ii) 0.80 pounds of hydrochloric acid (HCl) per ton of feed/charge.
  - (iii) 0.25 micrograms total polychlorinated dibenzofurans (D/F) international Toxicity Equivalent (TEQ) per megagram ( $3.5 \times 10^{-6}$  gr per ton) of feed/charge.
  - (iv) 0.06 pounds THC (Total Hydrocarbon) per ton of feed/charge.

#### Operating Requirements

- (a) The Permittee shall provide and maintain easily visible labels at each affected unit that identifies the applicable emission limit and means of compliance [63.1506(b)]. The labels shall include:
  - (1) The type of affected emission unit (i.e., Group 1 Furnace); and
  - (2) The applicable operational standard and control method, including the type of charge to be used in the furnace, flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the Operation, Maintenance, and Monitoring Plan.
- (b) Each affected unit shall be equipped with a capture and collection system that meets the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice." Captured emissions shall be vented through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter. The capture/collection system shall be operated according to the procedures and requirements in the Operation, Maintenance, and Monitoring Plan [63.1506(c)].
- (c) The Permittee shall install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each



operating cycle or time period used in the performance test. The Permittee shall operate each measurement system or other weight determination procedure in accordance with the Operation, Maintenance, and Monitoring Plan. [40 CFR 63.1506(d)]

- (d) For each affected unit, the Permittee shall comply with the following requirements [63.1506(m)]:
  - (1) Regarding the use of bag leak detection systems. The Permittee shall:
    - (A) Initiate corrective action within one (1) hour of a bag leak detection system alarm;
    - (B) Complete the corrective action procedures in accordance with the Operation, Maintenance, and Monitoring Plan; and
    - (C) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than five (5) percent of the operating time during a six (6) month reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the Permittee takes longer than one (1) hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the Permittee to initiate corrective action.
  - (2) Maintain the three (3) hour average inlet temperature for each fabric filter at or below the average temperature established during the performance test plus 25 degrees F.
  - (3) For a continuous-lime inject system, the Permittee shall maintain free-flowing alkaline agent in the hopper to the feed device at all times and maintain the alkaline agent feeder setting at the same level established during the performance test. For the purposes of this rule lime means calcium oxide or other alkaline reagent; and lime-injection means the continuous addition of lime upstream of the fabric filter.
  - (4) Maintain the total reactive flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- (e) When a process parameter deviates from the value or range established during the performance test and incorporated in the Operation, Maintenance, and Monitoring Plan, the Permittee shall initiate corrective action. The corrective action shall restore operation of the affected emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of the deviation [63.1506(p)].
- (f) The owner or operator shall operate the afterburner at all times the respective Scrap Dryer is in operation, in accordance with the OM&M plan. For the afterburner, the owner or operator must:

- (1) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.
- (2) Operate the afterburner in accordance with the OM&M plan.

### Monitoring Requirements

- (a) On or after the date of the initial performance test is required to be completed, the Permittee shall monitor all emission units and control equipment according to the following requirements [63.1510(a)]:

The Permittee shall calculate and record the 3-day, 24- hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the Permittee shall [63.1510(t)]:

- (1) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight data collected as required under Subpart RRR. If the Permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations shall be conducted on the aluminum production weight basis.
- (2) Multiply the total feed/charge weight to the emission unit, or the weight to the emission unit, or the weight of aluminum produced by the emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the emission test) to provide emissions for each emission unit for the 24-hour period, in pounds.
- (3) Divide the total emissions for each secondary aluminum processing unit for the 24-hour period by the total material charged to the secondary aluminum processing unit, or the total weight of aluminum produced by the secondary aluminum processing unit over the 24-hour period to provide the daily emission rate for the secondary emission unit.
- (4) Compute the 24-hour daily emission rate using the equation:

Where,

$$E_{day} = \frac{\sum_{i=1}^n (T_i ER_i)}{\sum_{i=1}^n T_i}$$

- |           |   |                                                                                                                            |
|-----------|---|----------------------------------------------------------------------------------------------------------------------------|
| $E_{day}$ | = | The daily respective PM, HCl, or D/F emission rate for the secondary aluminum processing unit for the 24-hour period;      |
| $T_i$     | = | The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period in tons;                        |
| $ER_i$    | = | The measured emission rate for emission unit i as determined in the performance test (lb/ton or ug/Mg or feed/charge); and |

n = The number of emission units in the secondary aluminum processing unit.

- (5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.
- (b) The Permittee shall prepare a written Operation, Maintenance, and Monitoring Plan and shall submit the plan to the applicable permitting authority for review and approval. Any subsequent changes to the plan shall be submitted to the applicable permitting authority for review and approval. Pending approval of the initial or amended plan, the Permittee shall comply with the conditions of the submitted plan. The plan shall include the following information [63.1510(b)]:
  - (1) The process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each affected unit and control device.
  - (2) A monitoring schedule for each affected unit.
  - (3) Procedures for the proper operation and maintenance of each affected unit and control device used to meet the applicable emission limit in 40 CFR 63.1505.
  - (4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
    - (A) Calibration and certification of accuracy of each monitoring device, at least once every six (6) months, according to the manufacturer's instructions; and
    - (B) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR 63, Subpart A.
  - (5) Procedures for monitoring process and control parameters, including procedures for annual inspections of afterburners, and if applicable, the procedures to be used for determining feed (or throughput) weight if a measurement device is not used.
  - (6) Corrective actions to be taken when process operating parameters or add-on control device parameters deviate from the value or range established in (A) above, including:
    - (A) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
    - (B) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date corrective action was completed.
  - (7) A maintenance schedule for each affected unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

- (c) The Permittee shall inspect the labels for each affected unit at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible [63.1510(c)].
- (d) For each reverberatory furnace [63.1510(i)]:
  - (1) Records shall be kept of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken.
  - (2) If lime feeder setting is monitored, records shall be kept of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and corrective action taken.
- (e) For each baghouse controlling emissions from a reverberatory furnace, rotary furnace, or scrap dryer, the Permittee shall install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in 40 CFR 63, Subpart A. The temperature monitoring system shall record the temperature in fifteen (15) minute block averages and calculate and record the temperature for each three (3) hour block period. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n). The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternative reference approved by the Administrator. [63.1510(h)]
- (f) The Permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, each furnace over the same operating cycle or time period used in the performance test. As an alternative to a measurement device, the Permittee may use a procedure acceptable to IDEM, OAQ to determine the total weight of feed or aluminum production for each affected unit. The accuracy of the weight measurement device or procedure shall be within one (1) percent of the weight being measured. The Permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six (6) months [63.1510(e)].
- (g) The Permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system for each baghouse controlling emissions from the furnaces, scrap dryer, and scrap shredder [63.1510(f)].
- (h) When the Permittee uses a continuous lime-injected fabric filter to comply with the requirements of 40 CFR 63, Subpart RRR, then the Permittee shall [63.1510(i)]:
  - (1) Verify that the lime (or other alkaline agent) is always free-flowing by inspecting the feed hopper or silo at least once each eight (8) hour

period and recording the results of each inspection. If the lime or other alkaline agent is found not to be free-flowing during any of the eight (8) hour periods, the Permittee shall increase the frequency of inspections to at least once every four (4) hour period for the next three (3) days. The Permittee may return to inspections at least once every eight (8) hour period if corrective action results in no further blockages of lime or other alkaline agent during the three (3) day period; or

- (2) The Permittee shall also record the feeder setting once each day of operation.
- (i) Pursuant to 63.1510(j), the Permittee shall:
- (1) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of flux injected into each affected unit. The monitoring system must record the weight for each fifteen (15) minute period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test. The accuracy of the weight measurement shall be within one (1) percent of the weight of the reactive component of the flux being measured. The Permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six (6) months.
  - (2) Calculate and record the flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test.
  - (3) Record, for each fifteen (15) minute time period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of reactive flux.
  - (4) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test.

The completion of the initial performance tests for the secondary aluminum processing units shall be considered to be the date of approval of the Operation, Maintenance and Monitoring Plan by IDEM, OAQ [63.1506(a)(2)].

- (j) The owner or operator of a scrap dryer using an afterburner for control shall:
- (1) Install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements of continuous monitoring systems in 40 CFR Part 63 Subpart A.
  - (2) The temperature monitoring device must:
    - (i) Be installed at the exit of each afterburner's combustion zone.
    - (ii) Record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.
    - (iii) Have a recorder response range including zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(m).

- (iv) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- (3) Conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:
  - (i) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;
  - (ii) Inspection for proper adjustment of combustion air;
  - (iii) Inspection of internal structures (e.g., baffles) to ensure structural integrity;
  - (iv) Inspection of dampers, fans, and blowers for proper operation;
  - (v) Inspection for proper sealing;
  - (vi) Inspection of motors for proper operation;
  - (vii) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;
  - (viii) Inspection of afterburner shell for corrosion and/or hot spots;
  - (ix) Documentation verifying that, for the burn cycle following the inspection, the afterburner is operating properly and all necessary adjustments have been made;
  - (x) Verification that the equipment is maintained in good operating condition.
  - (xi) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.

#### Performance Tests

- (a) Prior to conducting the performance test required by 40 CFR 63, Subpart RRR, the Permittee shall prepare and submit a site-specific test plan in compliance with 40 CFR 63.7(c). Following approval of the site-specific test plan, the Permittee shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected unit and report the results in the notification of compliance report. The Permittee shall conduct performance tests in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. The Permittee shall use Method 23 in Appendix A to 40 CFR 60 or an alternative method approved by the Administrator to measure the concentration of D/F.

The Permittee shall notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test shall be provided at least 30 days before the observations are scheduled to take place [63.1511(a)].

- (b) The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. The Permittee may use existing data in addition to the results of the performance test to establish operating parameter values for compliance monitoring provided the requirements of 40 CFR 63.1511(g) are met [40 CFR 63.1511(g)].

#### Notifications

- (a) Pursuant to 40 CFR 63, Subpart A, the Permittee must submit an initial notification to IDEM, OAQ upon startup of Reverberatory Furnaces #1 and #2, and Rotary Furnace M. The initial notification shall contain:
  - (1) The name and address of the owner or operator;
  - (2) The address (i.e., physical location) of the emission units;
  - (3) An identification of the relevant standard, or other requirement, that is the basis of the notification and the date on which the source is required to be in compliance; and
  - (4) A statement indicating whether the source is a major source or an area source.
- (b) Pursuant to 40 CFR 63.1515(b), the Permittee shall submit a notification of compliance status reports no more than 60 days after March 24, 2003 for the Scrap Shredder and Scrap Dryer, and upon startup for the Reverberatory Furnaces and Rotary furnace. The notification must be signed by the responsible official who must certify its accuracy. The report shall include:
  - (1) All information required in 40 CFR 63.9(h). The Permittee shall provide a complete performance test report for each affected unit, including data, associated measurements, and calculations.
  - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system.
  - (3) Unit labeling as described in 40 CFR 63.1506(b), including process type or each affected unit classification and operating requirements.
  - (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., alkaline agent injection rate, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
  - (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for the capture/collection system required in 40 CFR 63.1506(c).
  - (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems required in 40 CFR 63.1510(f).
  - (7) Approved Operation, Maintenance, and Monitoring Plan.

- (8) Startup, shutdown, and malfunction plan.

### Reports

- (a) The Permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the emission limit. The Permittee shall keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during startup, shutdown, or malfunction is not consistent with the procedures in the startup, shutdown, and malfunction plan. The plan shall include [63.1516(a)].
- (1) The procedures to determine and record the cause of a malfunction and the time the malfunction began and ended; and
- (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including the actions taken to correct the malfunction or minimize emissions.
- (b) The Permittee shall submit a semi-annual report within 60 days after the end of each six (6) month period detailing all deviations from the Operation, Maintenance, and Monitoring Plan. When no deviations have occurred, the Permittee shall submit a report stating that no excess emissions occurred during the reporting period. A report shall be submitted if any following conditions occur [63.1516(b)]:
- (1) An excursion of a compliant process or operating parameter value or range.
- (2) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan.
- (3) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.

The Permittee shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

### Records

The Permittee shall maintain files of all information, including reports and notifications, required by 40 CFR 63.10 and 40 CFR 63.1517. The Permittee shall retain each record for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent two (2) years of records shall be retained at the source. The remaining three (3) years of records may be retained off-site. The Permittee may retain records on microfilm, computer disks, magnetic tape or microfiche.

In addition to the general records required by 40 CFR 60.10(b), the Permittee shall maintain:

- (a) The number of total operating hours for the affected source or emission unit during each 6 month reporting period, records of each alarm, the time of the



alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.

- (b) For each Group 1 each affected unit with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when 3-hour block average temperature exceeds the compliant operating parameter value +25 degrees F, with a brief explanation of the cause of the excursion and the corrective action taken.
- (c) For each emission unit with emissions controlled by a lime-injected fabric filter:
  - (1) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;
  - (2) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and corrective action taken.
- (d) For each Group 1 furnace, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid, or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.
- (e) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (f) Records of any approved alternative monitoring or test procedure.
- (g) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
  - (1) Startup, shutdown, and malfunction plan;
  - (2) Operation, Maintenance, and Monitoring Plan; and
  - (3) Site-specific secondary aluminum processing unit emission plan.
- (h) For each secondary aluminum processing unit, records of total charge weight, or if the Permittee chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

The provisions of 40 CFR 63 subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 subpart RRR.

- (c) This source is subject to the provisions of 40 CFR 64, Compliance Assurance Monitoring. In order for this rule to apply, a specific emissions unit must meet three criteria for a given pollutant: 1) the unit is subject to an emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and, 3) the unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal or greater than 100 percent of the amount required for a source to be classified as a major source. For this source, the reverberatory and rotary furnaces require the use of baghouses to achieve compliance with the respective PM emission limitations and have an uncontrolled potential to emit PM greater than 100 tons per year. In addition, an afterburner and baghouse are required to control emissions from the Scrap Dryer in order to achieve compliance with emission limits and has an uncontrolled VOC and PM emission rate greater than 100 tons per year. Therefore, Reverberatory Furnaces #1, #2, #3, #4, the scrap dryer and Rotary Furnace M are subject to the requirements of 40 CFR 64. However, pursuant to 40 CFR 64.2(b)(1)(i), the requirements applicable to these facilities pursuant to 40 CFR 63 Subpart RRR (Secondary Aluminum processing NESHAP) satisfy the requirements of 40 CFR 64.

### **State Rule Applicability - Entire Source**

#### **326 IAC 2-2 (Prevention of Significant Deterioration)**

Superior Aluminum Alloys was issued construction permit CP 003-9243-00286 on May 1, 1998 permitting the construction of two reverberatory furnaces, furnaces #1 and #2, a scrap dryer, and a scrap shredder. During the permit application review process, it was determined that the source was classified as a major source for PSD for particulate matter (PM). At the source's request, the permit included PM limits to classify the source as a PSD Minor source for all criteria pollutants.

On October 18, 1999, the source submitted a permit application for a Part 70 permit. While the permit application was under review, the source was issued SSM 003-11927-00286 on June 7, 2000 to permit the construction of three new furnaces (reverberatory furnaces #3, #4, and rotary furnace M). This modification indicated that the limited potential to emit from the existing source, and the source after modification, for all criteria pollutants was less than the 100 ton per year PSD threshold. PM and NO<sub>x</sub> PSD emission limits for two reverberatory furnaces and one rotary furnace were included to render the requirements of PSD not applicable because the source expected to make more expansions to the plant at a later date.

During the permit review process for this Part 70 permit, it was determined that inappropriate emission factors were used, both in the original construction permit and in the source modification, to estimate the SO<sub>2</sub> emissions from the charging/melting operations of the furnaces and the NO<sub>x</sub> emissions from natural gas combustion. Once the correct emission factors were validated and the emission calculations were completed, it was determined that the source had been a major source for PSD for PM and NO<sub>x</sub> since the submission of the construction permit application in 1998. Consequently, the NO<sub>x</sub> PSD emission limits placed on the furnaces unsuccessfully limited the source's potential to emit NO<sub>x</sub> to less than 100 tons per year. The source was notified of the diagnosis and a PSD review was conducted to verify the determination and ascertain if the source had violated PSD requirements. Upon completion of the review, it was determined that the source had not violated PSD; the actual NO<sub>x</sub> emissions from the source were less than the 100 ton per year threshold.

In August, 2001, the source submitted an application for Significant Source Modification 003-14739-00286, to replace Reverberatory Furnaces #1 and #2 which had been determined to have structural failures.

The inaccurate PSD NO<sub>x</sub> emission limits placed on the reverberatory furnaces and rotary furnace, required pursuant to CP 003-9243-00286 and SSM 003-11927-00286, have been replaced by limiting the aggregate aluminum throughput of the reverberatory furnaces. The resulting emissions from the limited throughput are less than the previous PSD emissions limits. PM and PM-10 emission limitations placed on the baghouses (E, F, L, and N) controlling emissions from

Reverberatory Furnaces #1, #2, #3, #4 and Rotary Furnace M are included in this Part 70 permit in order to render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

In order to successfully limit the source's potential to emit NO<sub>x</sub>, the combined input of aluminum scrap to reverberatory furnaces #1, #2, #3, and #4 shall not exceed 300,000,000 pounds per twelve consecutive month period. This aluminum feed/charge limit, in combination with the unlimited NO<sub>x</sub> emission rate from the Rotary Furnace and unlimited NO<sub>x</sub> emissions from the Scrap Dryer, Melt Pots, and natural gas combustion from the reverberatory furnaces, will effectively limit the source's potential to emit nitrogen oxides (NO<sub>x</sub>) to less than 100 tons per twelve (12) consecutive month period. NO<sub>x</sub> emissions from each of the reverberatory furnaces #1, #2, #3, and #4 shall not exceed 0.25 pounds per ton of aluminum charged.

Compliance with these limits render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

**326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)**

This source emits levels of hazardous air pollutants (HAPs) greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act. However, this source is subject to the provisions of 40 CFR 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants, for Secondary Aluminum Production). Therefore, the provisions of 326 IAC 2-4.1 are not applicable to this source.

**326 IAC 2-6 (Emission Reporting)**

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of NO<sub>x</sub>. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

**326 IAC 5-1 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**326 IAC 1-6-3 (Preventive Maintenance Plan)**

The source submitted Preventive Maintenance Plans (PMPs) on June 4, 1999.

**326 IAC 1-5-2 (Emergency Reduction Plans)**

The source submitted an Emergency Reduction Plan (ERP) on December 1, 1999.

**State Rule Applicability - Furnaces**

**326 IAC 2-2 (Prevention of Significant Deterioration)**

The following conditions apply to Reverberatory Furnaces #1 through #4 and Rotary Furnace M:

- (a) The combined input of aluminum scrap to reverberatory furnaces #1, #2, #3, and #4 shall not exceed 300,000,000 pounds per twelve consecutive month period. This aluminum feed/charge limit, in combination with the unlimited NO<sub>x</sub> emission rate from

the Rotary Furnace and unlimited NO<sub>x</sub> emissions from the Scrap Dryer, and Melt Pots, will effectively limit the source's potential to emit nitrogen oxides (NO<sub>x</sub>) to less than 100 tons per twelve (12) consecutive month period.

- (b) NO<sub>x</sub> emissions from each of the reverberatory furnaces #1, #2, #3, and #4 shall not exceed 0.25 pounds per ton of aluminum charged and 0.01 pounds per ton of aluminum poured/cast.
- (c) The amount of flux used in each furnace shall be limited to 11,205,135 pounds per twelve consecutive month period.
- (d) The PM emissions from each furnace ( Reverberatory Furnaces #1 through #4 and Rotary Furnace M) shall not exceed 0.1 pounds per ton aluminum produced.
- (e) The PM10 emissions from each furnace ( Reverberatory Furnaces #1 through #4 and Rotary Furnace M) shall not exceed 0.1 pounds per ton aluminum produced.

Compliance with these limits render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

#### 326 IAC 6-3 (Process Operations)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the reverberatory and rotary furnaces, shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The limits for the various facilities are as follows:

Facility	Process Weight Rate (P) (tons/hour)	Allowable Emissions (E) (lb/hour)
Reverberatory Furnace #1	14	24.0
Reverberatory Furnace #2	14	24.0
Reverberatory Furnace #3	14	24.0
Reverberatory Furnace #4	14	24.0
Rotary Furnace	6	13.62

#### 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

None of the facilities at this source have a potential to emit SO<sub>2</sub> greater than 25 tons per year. Therefore, the requirements of 326 IAC 7-1.1-2 are not applicable.

#### State Rule Applicability - Scrap Shredder

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to CP 003-9243-00286, issued on May 1, 1998, the particulate matter (PM) emissions shall not exceed the allowable emission rate of 0.338 pounds per hour (equivalent to an allowable emission rate of 1.48 tons per year). Compliance with this limit renders the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

**326 IAC 6-3 (Process Operations)**

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emissions from the Scrap Shredder shall not exceed 22.27 pounds per hour based on a maximum process weight rate of 12.5 tons of scrap Aluminum per hour.

The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

**State Rule Applicability - Scrap Dryer**

**326 IAC 2-2 (Prevention of Significant Deterioration)**

Pursuant to CP 003-9243-00286, issued on May 1, 1998, and in order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the particulate matter (PM) emissions shall not exceed the allowable emission rate of 4.188 pounds per hour (equivalent to an emission rate of 18.34 tons per year).

**326 IAC 6-3 (Process Operations)**

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emissions from the Scrap Dryer shall not exceed 13.62 pounds per hour based on a maximum process weight rate of 6.0 tons of scrap Aluminum per hour.

The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

**326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)**

The Scrap Dryer does not have a potential to emit SO<sub>2</sub> greater than 25 tons per year. Therefore, the Scrap Dryer is not subject to the requirements of 326 IAC 7-1.1-2.

**326 IAC 8-1-6 (New Facilities; general reduction requirements)**

Pursuant to 326 IAC 8-1-6, and CP 003-9243-00286 on May 1, 1998, the afterburner, determined to be the best available control technology, shall be operated at all times that the Scrap Dryer is in operation. When operating, the afterburner must maintain a minimum VOC destruction efficiency of 99% and a minimum operating temperature of 1300 degrees Fahrenheit, or the temperature, residence time and air flow rate determined in the compliance tests to maintain a minimum 99% destruction of the volatile organic compound (VOC) captured. Compliance with this requirement will render 326 IAC 2-2 and 40 CFR 52.21 not applicable.

**State Rule Applicability - Specifically Regulated Insignificant Activities**

**326 IAC 6-3 (Process Operations)**

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from the insignificant welding, soldering, and brazing operations which have a maximum process weight rate less than 100 pounds per hour, shall not exceed 0.551 pounds per hour each.

**326 IAC 8-3-2 (Organic Solvent Degreasing Operations)**

The source is located in Allen County and the degreasing operations located at the source commenced after July 1, 1980. Therefore, the degreasing operations are subject to the requirements of 326 IAC 8-3-2.

### Testing Requirements

While the initial performance testing, required to pursuant to 40 CFR 63 Subpart RRR, was completed for Reverberatory furnace #3, the Scrap Dryer, and the Scrap Shredder, testing has not yet been conducted on the stacks exhausting emissions from Reverberatory furnaces #1, #2, #4, and the Rotary Furnace as they have not been constructed. Within 180 days after startup, the Permittee shall perform PM and PM10 testing on baghouses E, F, and N, and NO<sub>x</sub>, HCl, and D/F testing on Reverberatory furnaces #1, #2, #4, and Rotary furnace M, using methods as approved by the Commissioner, in order to demonstrate compliance with 40 CFR Part 63 Subpart RRR, 40 CFR 52.21, and 326 IAC 2-2. When testing baghouses E and F, reverberatory furnaces #1 and #2 shall be operated at 95% or more of their maximum design capacities. When testing baghouse N, the rotary furnace N and reverberatory furnace #4 shall be operated at 95% or more of its maximum design capacity. PM10 includes filterable and condensable PM10. Within forty-eight (48) months after issuance of this permit, the Permittee shall perform VOC testing on the Scrap Dryer utilizing methods as approved by the Commissioner to ensure compliance with 326 IAC 8-1-6. Testing shall be conducted in accordance with Section C- Performance Testing.

### Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The furnaces, dryer and shredder have applicable compliance monitoring conditions as specified below:
  - (a) The Permittee shall record the total static pressure drop across the respective baghouses controlling the furnaces, dryer and shredder, at least once per shift when those facilities are in operation and when venting to the atmosphere. When for any one reading, the pressure drop across the baghouses is outside the normal range of 1.0 to 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) An inspection shall be performed each calendar quarter of all bags controlling emissions from the furnaces, Scrap Shredder, and Scrap Dryer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (c) A quarterly summary of the weight of scrap aluminum and flux material fed to the reverberatory furnaces shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

These monitoring conditions (and those listed under *Federal Rule Applicability*) are necessary because the baghouse for the furnaces, dryer, and shredder must operate properly to ensure compliance with 40 CFR Part 63 Subpart RRR, 326 IAC 2-2, 326 IAC 6-3 and 326 IAC 2-7 (Part 70).

## Conclusion

The operation of this secondary aluminum production source shall be subject to the conditions of the attached proposed Part 70 Permit No. T003-11452-00286.

**Appendix A: Secondary Aluminum Production**

Page 1 of 8 TSD App A

**Reverberatory Furnaces**

**Company Name:** Superior Aluminum Alloys, L.L.C  
**Address City IN Zip:** 14214 Edgerton Road, New Haven, Indiana 46774  
**part 70 permit:** T003-11452-00286  
**Reviewer:** ERG/BS  
**Date:** 2/16/01

**Reverberatory Furnaces #1, #2, #3, and #4 (combined)**

SCC# 3-04-001-03 Charging/Melting						
TYPE OF MATERIAL	Number of Units	Throughput (each furnace) LBS/HR	1 TON/2000 lbs	TON/HR (all units)		
Aluminum	4	28000	2000	56		
	PM * lbs/ton metal charged	PM10 * lbs/ton metal charged	SOx ** lbs/ton metal charged	NOx *** lbs/ton metal charged	VOC ** lbs/ton metal charged	CO ^ lbs/ton metal charged
	4.3	2.6	0.09	0.25	0.12	0.168
Potential Emissions lbs/hr	240.8	145.6	5.0	14.0	6.7	9.4
Potential Emissions lbs/day	5779.2	3494.4	121.0	336.0	161.3	225.8
Potential Emissions tons/year	1054.7	637.7	22.1	61.3	29.4	41.2
SCC# 3-04-001-04 Fluxing/Chlorine (only for Reverberatory Furnaces)						
TYPE OF MATERIAL	Number of Units	Throughput (each furnace) LBS/HR	1 TON/2000 lbs	TON/HR (all units)		
Flux	4	1279.125	2000	2.55825		
	PM * lbs/ton Chlorine	PM10 * lbs/ton Chlorine	SOx lbs/ton Chlorine	NOx lbs/ton Chlorine	VOC lbs/ton Chlorine	CO lbs/tons Chlorine
	1000	532	0.00	0.00	0.00	-
Potential Emissions lbs/hr	2558.3	1361.0	0.0	0.0	0.0	-
Potential Emissions lbs/day	61398.0	32663.7	0.0	0.0	0.0	-
Potential Emissions tons/year	11205.1	5961.1	0.0	0.0	0.0	-
SCC# 3-04-001-14 Pouring/Casting						
TYPE OF MATERIAL	Number of Units	Throughput (each furnace) LBS/HR	1 TON/2000 lbs	Total Throughput TON/HR (all units)		
Aluminum	4	28000	2000	56		
	PM lbs/ton metal charged	PM10 lbs/ton metal charged	SOx * lbs/ton metal charged	NOx * lbs/ton metal charged	VOC * lbs/ton metal charged	CO lbs/tons metal fed
	--	--	0.02	0.01	0.14	-
Potential Emissions lbs/hr	0	0	1.12	0.560	7.840	-
Potential Emissions lbs/day	0	0	26.88	13.440	188.160	-
Potential Emissions tons/year	0	0	4.9	2.5	34.3	-
Total Controlled Emissions (tons/yr)****	3.75	3.75	27.0	63.8	63.8	41.2

\* Note: Emission factor is from FIRE version 6.01.

alum.wk4 7/95 updated 11/98

\*\* Based on Reverberatory #3 compliance testing on 1/10/2000

\*\*\* Based on emission limit guaranteed by the manufacturer

\*\*\*\* Controlled PM emissions are based on grain loadings and volumetric flow rates from stack testing for furnaces #1, #2, and #3. Controlled PM emissions from furnace #4 is included in the emissions from the Rotary Furnace.

\* Based on stack test conducted by Wabash Alloys on a similar process. This EF was used to estimate emissions from the furnaces in the original construction permit.

^ The CO emissions are from natural gas combustion. The emission factor was determined using the AP-42 factor for natural gas combustion and furnace specifications.

Emission factors which are not otherwise footnoted are from the permit application and have been accepted either via the original construction permit or from a test report used for draft NESHAP.



**Appendix A: Secondary Aluminum Production  
Reverberatory Furnaces**

**Company Name:** Superior Aluminum Alloys, L.L.C  
**Address City IN Zip:** 14214 Edgerton Road, New Haven, Indiana 46774  
**part 70 permit:** T003-11452-00286  
**Reviewer:** ERG/BS  
**Date:** 2/16/01

**Reverberatory Furnaces HAP Emissions**

02/19/2000 - AS PROVIDED FROM SOURCE

Emissions Basis for Reverberatory Furnaces (4) (Charging/Melt, Holding, Melt Pots, Casting)

Maximum feed/charge capacity: 14 Tons/Hr (each)  
Holding Area (4) Heat Input: 28 MMBTU/Hr (each)  
Melt Pot burners (32) Heat Input: 1.5 MMBTU/Hr (each)  
Baghouse PM Efficiency: 99.83% % Est. Based on the Reverberatory Furnace compliance testing on 3/25/99  
Hours of Operation: 8760 Hr/Year

NESHAP Emission Factors	CAS	***Control Eff.	Controlled**	Units	Uncontrolled*
Antimony	7404	78.7 +	ND	Lbs/Ton	2.77E-03
Arsenic	7400	78.7	1.44E-04	Lbs/Ton	6.77E-04
Beryllium	7392	41.9	5.79E-05	Lbs/Ton	9.96E-05
Cadmium	7388	92.9	7.00E-05	Lbs/Ton	9.88E-04
Chlorine	7727	66.7	1.00E-03	Lbs/Ton	3.00E-03
Chromium	7390	97.3	3.03E-05	Lbs/Ton	1.13E-03
Hydrogen Chloride	7646	14.9	4.00E-01	Lbs/Ton	4.70E-01
Lead	7346	79.8	1.30E-03	Lbs/Ton	6.42E-03
Manganese	7338	44.7	1.83E-03	Lbs/Ton	3.31E-03
Mercury	7336	88.7	3.11E-05	Lbs/Ton	2.75E-04
Nickel	7438	94.6	4.10E-05	Lbs/Ton	7.59E-04
Selenium	7731	78.7 +	ND	Lbs/Ton	3.55E-04
Polychlorinated dibenzofurans total	N/A	77.7	7.14E-08	Lbs/Ton	3.20E-07
Polychlorinated dibenzo-p-dioxins total	N/A	77.7	7.14E-08	Lbs/Ton	3.20E-07

\* Uncontrolled emission factors from test report used by USEPA for draft NESHAPS.

\*\* Controlled emission factors from test report used by USEPA for draft NESHAPS.

\*\*\* Control Eff. = (Uncontrolled emission factor - Controlled emission factor) / Uncontrolled emission factor \* 100.

+ Presumed same as arsenic

**Reverberatory Furnace Potential Uncontrolled Emissions (NESHAP)**

Emissions (Tons per Year) = Max. Scrap Aluminum Rate (Tons/Hr) X Emission Factor / 2000 X 8760

Antimony	=	0.17	Tons/Yr (each furnace)
Arsenic	=	0.04	Tons/Yr (each furnace)
Beryllium	=	0.01	Tons/Yr (each furnace)
Cadmium	=	0.06	Tons/Yr (each furnace)
Chlorine	=	0.18	Tons/Yr (each furnace)
Chromium	=	0.07	Tons/Yr (each furnace)
Hydrogen Chloride	=	28.82	Tons/Yr (each furnace)
Lead	=	0.39	Tons/Yr (each furnace)
Manganese	=	0.20	Tons/Yr (each furnace)
Mercury	=	0.02	Tons/Yr (each furnace)
Nickel	=	0.05	Tons/Yr (each furnace)
Selenium	=	0.02	Tons/Yr (each furnace)
Polychlorinated dibenzofurans total	=	0.00	Tons/Yr (each furnace)
Polychlorinated dibenzo-p-dioxins total	=	0.00	Tons/Yr (each furnace)
Total Potential To Emit	=	<b>30.03</b>	Tons/Yr (each furnace)

**Appendix A: Secondary Metal Production**

Page 3 of 8 TSD App A

**Aluminum**

**Company Name:** Superior Aluminum Alloys, L.L.C  
**Address City IN Zip:** 14214 Edgerton Road, New Haven, Indiana 46774  
**part 70 permit:** T003-11452-00286  
**Reviewer:** ERG/BS  
**Date:** 2/16/01

**Rotary Furnace M**

Rotary Furnace M		Rotary Furnace Throughput=		12000	lb Al/hr	
SCC# 3-04-001-03						
Charging/Melting						
TYPE OF MATERIAL	Number of Units	Total Throughput LBS/HR	1 TON/2000 lbs	TON/HR (all units)		
Aluminum	1	12000	2000	6		
	PM *	PM10 *	SOx "	NOx ***	VOC **	CO ^
	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged
	4.3	2.6	0.09	0.25	0.12	0.168
Potential Emissions lbs/hr	25.8	15.6	0.5	1.5	0.7	1.0
Potential Emissions lbs/day	619.2	374.4	13.0	36.0	17.3	24.2
Potential Emissions tons/year	113.0	68.3	2.4	6.6	3.2	4.4
SCC# 3-04-001-14		Rotary Furnace Throughput=		12000	lb Al/hr	
Pouring/Casting						
TYPE OF MATERIAL	Number of Units	Total Throughput LBS/HR	1 TON/2000 lbs	Total Throughput TON/HR (all units)		
Aluminum	1	12000	2000	6		
	PM	PM10	SOx *	NOx *	VOC *	CO
	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/ton metal charged	lbs/tons metal charged
	--	--	0.02	0.01	0.14	-
Potential Emissions lbs/hr	0	0	0.12	0.060	0.840	0.000
Potential Emissions lbs/day	0	0	2.88	1.440	20.160	0.000
Potential Emissions tons/year	0	0	0.5256	0.263	3.679	0.000
Total Controlled Emissions tons/year	1.80	1.80	2.9	6.8	6.8	4.4

\* Note: Emission factor is from FIRE version 6.01.

alum.wk4 7/95 updated 11/98

\*\* Based on Reveratory Compliance testing on 1/10/2000

\*\*\* Based on emission limit guaranteed by the manufacturer

\*\*\*\* Controlled PM emissions are based on grain loadings and volumetric flow rates from stack testing. This includes controlled emissions from furnace #4.

\* Based on stack test conducted by Wabash Alloys on a similar process. This EF was used to estimate emissions from the furnaces in the original construction permit.

^ The CO emissions are from natural gas combustion. The emission eactor was determined using the AP-42 factor for natural gas combustion and furnace specifications.

Emission factors which are not otherwise footnoted are from the permit application and have been accepted either via the orginal construction permit or from a test report used for draft NESHAP.

**Appendix A: Secondary Aluminum Production****Rotary Furnace**

**Company Name:** Superior Aluminum Alloys, L.L.C  
**Address City IN Zip:** 14214 Edgerton Road, New Haven, Indiana 46774  
**part 70 permit:** T003-11452-00286  
**Reviewer:** ERG/BS  
**Date:** 2/16/01

**Rotary Furnace HAP Emissions**

02/19/2000 - AS PROVIDED FROM SOURCE

Emissions Basis for Reverberatory Furnaces (4) (Charging/Melt, Holding, Melt Pots, Casting)

Maximum feed/charge capacity: 6 Tons/Hr  
 Holding Area Heat Input: 12 MMBTU/Hr (each)  
 Baghouse PM Efficiency: 99.83% % Est. Based on the Reverberatory Furnace compliance testing on 3/25/99  
 Hours of Operation: 8760 Hr/Year

NESHAP Emission Factors	CAS	**Control Eff.		Controlled**	Units	Uncontrolled*
Antimony	7404	78.7	+	ND	Lbs/Ton	2.77E-03
Arsenic	7400	78.7		1.44E-04	Lbs/Ton	6.77E-04
Beryllium	7392	41.9		5.79E-05	Lbs/Ton	9.96E-05
Cadmium	7388	92.9		7.00E-05	Lbs/Ton	9.88E-04
Chlorine	7727	66.7		1.00E-03	Lbs/Ton	3.00E-03
Chromium	7390	97.3		3.03E-05	Lbs/Ton	1.13E-03
Hydrogen Chloride	7646	14.9		4.00E-01	Lbs/Ton	4.70E-01
Lead	7346	79.8		1.30E-03	Lbs/Ton	6.42E-03
Manganese	7338	44.7		1.83E-03	Lbs/Ton	3.31E-03
Mercury	7336	88.7		3.11E-05	Lbs/Ton	2.75E-04
Nickel	7438	94.6		4.10E-05	Lbs/Ton	7.59E-04
Selenium	7731	78.7	+	ND	Lbs/Ton	3.55E-04
Polychlorinated dibenzofurans total	N/A	77.7		7.14E-08	Lbs/Ton	3.20E-07
Polychlorinated dibenzo-p-dioxins total	N/A	77.7		7.14E-08	Lbs/Ton	3.20E-07

\* Uncontrolled emission factors from test report used by USEPA for draft NESHAPS.

\*\* Controlled emission factors from test report used by USEPA for draft NESHAPS.

\*\*\* Control Eff. = (Uncontrolled emission factor - Controlled emission factor) / Uncontrolled emission factor \* 100.

+ Presumed same as arsenic

**Reverberatory Furnace Potential Uncontrolled Emissions (NESHAP)**

Emissions (Tons per Year) = Max. Scrap Aluminum Rate (Tons/Hr) X Emission Factor / 2000 X 8760

Antimony	=	0.07	Tons/Yr
Arsenic	=	0.02	Tons/Yr
Beryllium	=	0.00	Tons/Yr
Cadmium	=	0.03	Tons/Yr
Chlorine	=	0.08	Tons/Yr
Chromium	=	0.03	Tons/Yr
Hydrogen Chloride	=	12.35	Tons/Yr
Lead	=	0.17	Tons/Yr
Manganese	=	0.09	Tons/Yr
Mercury	=	0.01	Tons/Yr
Nickel	=	0.02	Tons/Yr
Selenium	=	0.01	Tons/Yr
Polychlorinated dibenzofurans total	=	0.00	Tons/Yr
Polychlorinated dibenzo-p-dioxins total	=	0.00	Tons/Yr
Total Potential To Emit	=	<b>12.87</b>	Tons/Yr

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion: unit MM BTU/HR <100**  
**Melt Pot Heating**

Page 5 of 8 TSD App A

**Company Name: Superior Aluminum Alloys, L.L.C**  
**Address City IN Zip: 14214 Edgerton Road, New Haven, Indiana 46774**  
**Part 70: T003-11452-00286**  
**Reviewer: ERG/BS**  
**Date: 2/16/01**

Aggregate Heat Input Capacity \*\*\*  
MMBtu/hr

Potential Throughput  
MMCF/yr

36

315.36

Emission Factor in lb/MMCF	Pollutants					
	PM*	PM10*	SO2	NOx	VOC	CO
	7.6	7.6	0.6	50.0	5.5	84.0
Potential Emission in tons/yr	1.20	1.20	0.09	**see below	0.87	13.25

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

\*\*\* Aggregate Heat Input: 12 Melt Pot Stands x 2 burners/Stand x 1.5 MMBtu/hr per burner = 160 MMBtu/hr

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

gasc99.wk4 9/95

## Appendix A: Secondary Aluminum Production

### Scrap Shredder

Company Name: Superior Aluminum Alloys, L.L.C  
 Address City IN Zip: 14214 Edgerton Road, New Haven, Indiana 46774  
 part 70 permit: T003-11452-00286  
 Reviewer: ERG/BS  
 Date: 2/16/01

## Scrap Shredder Emissions - Point C

As provided by the source- 02/09/00

### Potential Uncontrolled Emissions

Maximum Scrap Aluminum Rate: 12.5 Tons/Hr  
 Hours of Operation: 8760 Hr/Year  
 PM/PM-10 Emission Factor: 1.35 Lbs/Ton (construction permit emission factor)  
 Baghouse Efficiency: 99.6 %  
 Note that the exhaust from the baghouse is vented indoors

$$\begin{aligned} \text{PM/PM-10 Emissions (pounds per hour)} &= \text{Scrap Aluminum Rate} \times \text{PM Emission Factor} \\ &= 16.875 \text{ Lbs/Hr} \end{aligned}$$

$$\begin{aligned} \text{Maximum Uncontrolled PM/PM-10 Emissions (Tons per Year)} &= \\ \text{PM Emissions (pounds per hour)} \times \text{Hours of Operation} / 2000 \text{ Lbs/Ton} &= \\ &= 73.9125 \text{ Tons/Yr} \end{aligned}$$

### Maximum Controlled Emissions

$$\begin{aligned} \text{PM/PM-10 Emissions (pounds per hour)} &= \\ \text{Uncontrolled Emissions} \times (1 - \text{baghouse efficiency}/100) &= \\ &= 0.0675 \text{ Lbs/Hr} \\ &= 0.29565 \text{ Tons/Yr} \end{aligned}$$

$$\begin{aligned} \text{Limited Potential Emissions (NESHAP, 40 cfr 63 subpart RRR)} &= 2.25 \text{ ton PM/year} \\ \text{(Equivalent to 0.01 gr/dscf)} & \end{aligned}$$

**Appendix A: Secondary Aluminum Production****Scrap Dryer Emissions**

Company Name: Superior Aluminum Alloys, L.L.C  
 Address City IN Zip: 14214 Edgerton Road, New Haven, Indiana 46774  
 part 70 permit: T003-11452-00286  
 Reviewer: ERG/BS  
 Date: 2/16/01

**Scrap Dryer Emissions - Point D**

02/19/2000

**Emissions Basis (Dryer, Afterburner, Dryer Natural Gas )**

Maximum Scrap Aluminum Rate: 6 Tons/Hr  
 Afterburner Heat Input: 12 MMBTU/Hr Maximum  
 Dryer Natural Gas Heat Input: 6 MMBTU/Hr Maximum  
 Stack Flow Rate: 32,000 acfm  
 Baghouse grain loading (gr/dscf) 0.0013 gr/dscf  
 Afterburner Efficiency: 99 % Required efficiency under 326 IAC 8-1-6 BACT analysis  
 Hours of Operation: 8760 Hr/Year

**Dryer Emission Factors**

PM/PM-10 Emission Factor: 35.9 Lbs/Ton (construction permit emission factor)  
 SOx Emission Factor: 0.42 Lbs/Ton (Based on the dryer compliance testing on 1/11/2000)  
 NOx Emission Factor: 0.9 Lbs/Ton (construction permit emission factor)  
 VOC Emission Factor: 87 Lbs/Ton (Based on the dryer compliance testing on 1/11/2000)

**Potential Uncontrolled Emissions (Dryer)**

Emissions (pounds per hour) = Max. Scrap Aluminum Rate x Emission Factor, x 8760 hr/yr / 2000 lb/ton

PM/PM-10 =	215.4 Lbs/Hr	=	943.452 Tons/Yr
SOx =	2.52 Lbs/Hr	=	11.0376 Tons/Yr
NOx =	5.4 Lbs/Hr	=	23.652 Tons/Yr
VOC =	522 Lbs/Hr	=	2286.36 Tons/Yr

**Maximum Controlled Emissions (Dryer)**

PM/PM-10 Emissions (pounds per hour) = baghouse grain loading (gr/dscf) x volumetric flow rate (acfm) x 1/7000 lb/gr x 60 min/hr  
 VOC Emissions (pounds per hour) = uncontrolled emissions x (1- afterburner efficiency/100)  
 SO2 Emissions (pounds per hour) = uncontrolled emissions  
 NOx Emissions (pounds per hour) = uncontrolled emissions

PM/PM-10 =	0.36 Lbs/Hr	=	1.56 Tons/Yr
SOx =	2.52 Lbs/Hr	=	11.04 Tons/Yr
NOx =	5.4 Lbs/Hr	=	23.65 Tons/Yr
VOC =	5.22 Lbs/Hr	=	22.86 Tons/Yr

**Combustion Emission Factors (for Afterburner and Dryer)**

PM/PM-10 Emission Factor: 7.6 Lbs/MMFT3 (emission factor from AP 42 , Fifth Ed., Chapter 1.4)  
 SOx Emission Factor: 0.6 Lbs/MMFT3 (emission factor from AP 42 , Fifth Ed., Chapter 1.4)  
 NOx Emission Factor: 100 Lbs/MMFT3 (emission factor from AP 42 , Fifth Ed., Chapter 1.4)  
 VOC Emission Factor: 5.5 Lbs/MMFT3 (emission factor from AP 42 , Fifth Ed., Chapter 1.4)  
 CO Emission Factor: 84 Lbs/MMFT3 (emission factor from AP 42 , Fifth Ed., Chapter 1.4)  
 Heat Content: 1020 MMBTU/MMFT3

**Potential Uncontrolled Emissions (Afterburner Natural Gas Combustion)**

Emissions (pounds per hour) = Afterburner Heat Input / Heat Content X Emission Factor

PM/PM-10 =	0.09 Lbs/Hr	=	0.39 Tons/Yr
SOx =	0.01 Lbs/Hr	=	0.03 Tons/Yr
NOx =	1.18 Lbs/Hr	=	5.15 Tons/Yr
VOC =	0.06 Lbs/Hr	=	0.28 Tons/Yr
CO =	0.99 Lbs/Hr	=	4.33 Tons/Yr

**Potential Uncontrolled Emissions (Dryer Natural Gas Fuel Combustion)**

Emissions (pounds per hour) = Natural Gas Heat Input / Heat Content X Emission Factor

PM/PM-10 =	0.04 Lbs/Hr	=	0.20 Tons/Yr
SOx =	0.00 Lbs/Hr	=	0.02 Tons/Yr
NOx =	0.59 Lbs/Hr	=	2.58 Tons/Yr
VOC =	0.03 Lbs/Hr	=	0.14 Tons/Yr
CO =	0.49 Lbs/Hr	=	2.16 Tons/Yr

**Appendix A: Secondary Aluminum Production****Scrap Dryer Emissions**

Company Name: Superior Aluminum Alloys, L.L.C  
Address City IN Zip: 14214 Edgerton Road, New Haven, Indiana 46774  
part 70 permit: T003-11452-00286  
Reviewer: ERG/BS  
Date: 2/16/01

**Scrap Dryer Emissions - Point D (NESHAP CONSTITUENTS)**

02/09/2000

Emissions Basis (Dryer, Afterburner, Dryer Natural Gas )

Maximum Scrap Aluminum Rate: 6 Tons/Hr  
Afterburner Heat Input: 12 MMBTU/Hr Maximum  
Dryer Natural Gas Heat Input: 6 MMBTU/Hr Maximum  
Stack Flow Rate: 48,000 ACFM  
Baghouse Efficiency: 99.8 % Est. Based on the dryer compliance testing on 1/11/00  
Afterburner Efficiency: 98.4 % Est. Based on the dryer compliance testing on 1/11/00  
Hours of Operation: 8,760 Hr/Year

NESHAP Dryer Emission Factors	CAS	Destruction/ Control Eff.*		Controlled	Units	Uncontrolled
Antimony	7404	78.7	**	4.29E-09	Lb/Al charge rate	2.01E-08
Arsenic	7400	78.7	**	6.32E-10	Lb/Al charge rate	2.97E-09
Cadmium	7388	92.9	**	1.40E-09	Lb/Al charge rate	1.97E-08
Chromium	7390	97.3	**	2.02E-08	Lb/Al charge rate	7.48E-07
Formaldehyde	50	98.4	**	2.21E-09	Lb/Al charge rate	1.38E-07
Hydrogen Chloride	7646	14.9	***	1.36E-03	Lb/Al charge rate	1.60E-03
Hydrogen Fluoride	7622	14.9	***	1.26E-06	Lb/Al charge rate	1.48E-06
Lead	7346	79.8	**	5.18E-09	Lb/Al charge rate	2.56E-08
Manganese	7338	44.7	**	3.28E-08	Lb/Al charge rate	5.93E-08
Mercury	7336	88.7	***	2.80E-09	Lb/Al charge rate	2.80E-09
Nickel	7438	94.6	**	2.34E-08	Lb/Al charge rate	4.33E-07
Selenium	7731	78.7	**	1.25E-09	Lb/Al charge rate	5.87E-09
Polychlorinated dibenzofurans total	N/A	98.4	***	2.72E-12	Lb/Al charge rate	1.70E-10
Polychlorinated dibenzo-p-dioxins total	N/A	98.4	***	9.12E-13	Lb/Al charge rate	5.70E-11

\* Control Efficiency from Reverberatory NESHAP test results

\*\* Uncontrolled emission factor = Controlled emission factor / (1- baghouse Effic. / 100)

\*\*\* Controlled emission factor = Uncontrolled emission factor \* (1- afterburner Effic. / 100)

**Dryer Potential Uncontrolled Emissions (NESHAP)**

Emissions (Tons per Year) = Max. Scrap Aluminum Rate (Lbs/Hr) X Emission Factor / 2000 X 8760

Antimony	=	0.00	Tons/Yr
Arsenic	=	0.00	Tons/Yr
Cadmium	=	0.00	Tons/Yr
Chromium	=	0.04	Tons/Yr
Formaldehyde	=	0.01	Tons/Yr
Hydrogen Chloride	=	84.10	Tons/Yr
Hydrogen Fluoride	=	0.08	Tons/Yr
Lead	=	0.00	Tons/Yr
Manganese	=	0.00	Tons/Yr
Mercury	=	0.00	Tons/Yr
Nickel	=	0.02	Tons/Yr
Selenium	=	0.00	Tons/Yr
Polychlorinated dibenzofurans total	=	0.00	Tons/Yr
Polychlorinated dibenzo-p-dioxins total	=	0.00	Tons/Yr
Total Potential To Emit	=	<b>84.25</b>	<b>Tons/Yr</b>

**Subpart QQQ [Reserved]****Subpart RRR—National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production**

SOURCE: 65 FR 15710, Mar. 23, 2000, unless otherwise noted.

**GENERAL****§ 63.1500 Applicability.**

(a) The requirements of this subpart apply to the owner or operator of each secondary aluminum production facility.

(b) The requirements of this subpart apply to the following affected sources, located at a secondary aluminum production facility that is a major source of hazardous air pollutants (HAPs) as defined in § 63.2:

(1) Each new and existing aluminum scrap shredder;

(2) Each new and existing thermal chip dryer;

(3) Each new and existing scrap dryer/delacquering kiln/decoating kiln;

(4) Each new and existing group 2 furnace;

(5) Each new and existing sweat furnace;

(6) Each new and existing dross-only furnace;

(7) Each new and existing rotary dross cooler; and

(8) Each new and existing secondary aluminum processing unit.

(c) The requirements of this subpart pertaining to dioxin and furan (D/F) emissions and associated operating, monitoring, reporting and record-keeping requirements apply to the following affected sources, located at a secondary aluminum production facility that is an area source of HAPs as defined in § 63.2:

(1) Each new and existing thermal chip dryer;

(2) Each new and existing scrap dryer/delacquering kiln/decoating kiln;

(3) Each new and existing sweat furnace;

(4) Each new and existing secondary aluminum processing unit, containing one or more group 1 furnace emission units processing other than clean charge.

(d) The requirements of this subpart do not apply to manufacturers of aluminum die castings, aluminum foundries, or aluminum extruders that melt no materials other than clean charge and materials generated within the facility; and that also do not operate a thermal chip dryer, sweat furnace or scrap dryer/delacquering kiln/decoating kiln.

(e) The requirements of this subpart do not apply to facilities and equipment used for research and development that are not used to produce a saleable product.

(f) The owner or operator of a secondary aluminum production facility subject to the provisions of this subpart, is subject to the title V permitting requirements under 40 CFR parts 70 and 71, as applicable. The permitting authority may defer the affected facility from the title V permitting requirements until December 9, 2004, if the secondary aluminum production facility is not a major source and is not located at a major source as defined under 40 CFR 63.2, 70.2, or 71.2, and is not otherwise required to obtain a title V permit. If an affected facility receives a deferral from title V permitting requirements under this section, the source must submit a title V permit application by December 9, 2005. The affected facility must continue to comply with the provisions of this subpart applicable to area sources, even if a deferral from title V permitting requirements has been granted to the facility by the permitting authority.

**§ 63.1501 Dates.**

(a) The owner or operator of an existing affected source must comply with the requirements of this subpart by March 24, 2003.

(b) The owner or operator of a new affected source that commences construction or reconstruction after February 11, 1999 must comply with the requirements of this subpart by March 23, 2000 or upon startup, whichever is later.

**§ 63.1502 Incorporation by reference.**

(a) The following material is incorporated by reference in the corresponding sections noted. The incorporation by reference (IBR) of certain



publications listed in the rule will be approved by the Director of the Office of the Federal Register as of the date of publication of the final rule in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. This material is incorporated as it exists on the date of approval:

(1) Chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice," American Conference of Governmental Industrial Hygienists, (23rd edition, 1998), IBR approved for § 63.1506(c), and

(2) "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA/625/3-89/016).

(b) The material incorporated by reference is available for inspection at the Office of the Federal Register, 800 North Capitol Street NW, Suite 700, Washington, DC; and at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M Street SW, Washington, DC. The material is also available for purchase from the following addresses:

(1) Customer Service Department, American Conference of Governmental Industrial Hygienists (ACGIH), 1330 Kemper Meadow Drive, Cincinnati, OH 45240-1634, telephone number (513) 742-2020; and

(2) The National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA, NTIS no. PB 90-145756.

#### § 63.1503 Definitions.

Terms used in this subpart are defined in the Clean Air Act as amended (CAA), in § 63.2, or in this section as follows:

*Add-on air pollution control device* means equipment installed on a process vent that reduces the quantity of a pollutant that is emitted to the air.

*Afterburner* means an air pollution control device that uses controlled flame combustion to convert combustible materials to noncombustible gases; also known as an incinerator or a thermal oxidizer.

*Aluminum scrap shredder* means a unit that crushes, grinds, or breaks aluminum scrap into a more uniform size prior to processing or charging to a

*scrap dryer/delacquering kiln/decoating kiln*, or furnace. A bale breaker is not an *aluminum scrap shredder*.

*Bag leak detection system* means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.*, baghouse) in order to detect bag failures. A *bag leak detection system* includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to monitor relative particulate matter loadings.

*Chips* means small, uniformly-sized, unpainted pieces of aluminum scrap, typically below 1¼ inches in any dimension, primarily generated by turning, milling, boring, and machining of aluminum parts.

*Clean charge* means furnace charge materials including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; uncoated/unpainted thermally dried aluminum chips; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher; other oil- and lubricant-free unpainted/uncoated gates and risers; oil- and lubricant-free unpainted/uncoated aluminum scrap, shapes, or products (*e.g.*, pistons) that have not undergone any process (*e.g.*, machining, coating, painting, etc.) that would cause contamination of the aluminum (with oils, lubricants, coatings, or paints); and internal runaround.

*Cover flux* means salt added to the surface of molten aluminum in a group 1 or group 2 furnace, without agitation of the molten aluminum, for the purpose of preventing oxidation.

*D/F* means dioxins and furans.

*Dioxins and furans* means tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans.

*Dross* means the slags and skimmings from aluminum melting and refining operations consisting of fluxing agent(s), impurities, and/or oxidized and non-oxidized aluminum, from scrap aluminum charged into the furnace.

*Dross-only furnace* means a furnace, typically of rotary barrel design, dedicated to the reclamation of aluminum from dross formed during melting, holding, fluxing, or alloying operations carried out in other process units.

Dross and salt flux are the sole feedstocks to this type of furnace.

*Emission unit* means a *group 1 furnace* or *in-line fluxer* at a *secondary aluminum production facility*.

*Fabric filter* means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media; also known as a baghouse.

*Feed/charge* means, for a furnace or other process unit that operates in batch mode, the total weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the furnace during an operating cycle. For a furnace or other process unit that operates continuously, *feed/charge* means the weight of material (including molten aluminum, T-bar, sow, ingot, etc.) and alloying agents that enter the process unit within a specified time period (e.g., a time period equal to the performance test period). The *feed/charge* for a dross only furnace includes the total weight of dross and solid flux.

*Fluxing* means refining of molten aluminum to improve product quality, achieve product specifications, or reduce material loss, including the addition of solvents to remove impurities (solvent flux); and the injection of gases such as chlorine, or chlorine mixtures, to remove magnesium (demagging) or hydrogen bubbles (degassing). *Fluxing* may be performed in the furnace or outside the furnace by an *in-line fluxer*.

*Furnace hearth* means the combustion zone of a furnace in which the molten metal is contained.

*Group 1 furnace* means a furnace of any design that melts, holds, or processes aluminum that contains paint, lubricants, coatings, or other foreign materials with or without reactive fluxing, or processes *clean charge* with *reactive fluxing*.

*Group 2 furnace* means a furnace of any design that melts, holds, or processes only *clean charge* and that performs no *fluxing* or performs *fluxing* using only nonreactive, non-HAP-containing/non-HAP-generating gases or agents.

*HCl* means, for the purposes of this subpart, emissions of hydrogen chloride that serve as a surrogate measure

of the total emissions of the HAPs hydrogen chloride, hydrogen fluoride and chlorine.

*In-line fluxer* means a device exterior to a furnace, located in a transfer line from a furnace, used to refine (flux) molten aluminum; also known as a flux box, degassing box, or demagging box.

*Internal runaround* means scrap material generated on-site by aluminum extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations that do not contain paint or solid coatings. Aluminum chips generated by turning, boring, milling, and similar machining operations that have not been dried at 343 °C (650 °F) or higher, or by an equivalent non-thermal drying process, are not considered internal runaround.

*Lime* means calcium oxide or other alkaline reagent.

*Lime-injection* means the continuous addition of lime upstream of a *fabric filter*.

*Melting/holding furnace*, or melter/holder, means a *group 1 furnace* that processes only *clean charge*, performs melting, holding, and fluxing functions, and does not transfer molten aluminum to or from another furnace.

*Operating cycle* means for a batch process, the period beginning when the feed material is first charged to the operation and ending when all feed material charged to the operation has been processed. For a batch melting or holding furnace process, *operating cycle* means the period including the charging and melting of scrap aluminum and the fluxing, refining, alloying, and tapping of molten aluminum (the period from tap-to-tap).

*PM* means, for the purposes of this subpart, emissions of particulate matter that serve as a measure of total particulate emissions and as a surrogate for metal HAPs contained in the particulates, including but not limited to, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium.

*Pollution prevention* means source reduction as defined under the Pollution Prevention Act of 1990 (e.g., equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in

housekeeping, maintenance, training, or inventory control), and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources, or protection of natural resources by conservation.

*Reactive fluxing* means the use of any gas, liquid, or solid flux (other than cover flux) that results in a HAP emission. Argon and nitrogen are not reactive and do not produce HAPs.

*Reconstruction* means the replacement of components of an affected source or *emission unit* such that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new affected source, and it is technologically and economically feasible for the reconstructed source to meet relevant standard(s) established in this subpart. Replacement of the refractory in a furnace is routine maintenance and is not a *reconstruction*. The repair and replacement of *in-line fluxer* components (e.g., rotors/shafts, burner tubes, refractory, warped steel) is considered to be routine maintenance and is not considered a *reconstruction*. *In-line fluxers* are typically removed to a maintenance/repair area and are replaced with repaired units. The replacement of an existing *in-line fluxer* with a repaired unit is not considered a *reconstruction*.

*Residence time* means, for an *after-burner*, the duration of time required for gases to pass through the *after-burner* combustion zone. *Residence time* is calculated by dividing the *after-burner* combustion zone volume in cubic feet by the volumetric flow rate of the gas stream in actual cubic feet per second.

*Rotary dross cooler* means a water-cooled rotary barrel device that accelerates cooling of dross.

*Scrap dryer/delacquering kiln/decoating kiln* means a unit used primarily to remove various organic contaminants such as oil, paint, lacquer, ink, plastic, and/or rubber from aluminum scrap (including used beverage containers) prior to melting.

*Secondary aluminum processing unit (SAPU)*: an existing SAPU means all existing *group 1 furnaces* and all exist-

ing *in-line fluxers* within a *secondary aluminum production facility*. Each existing *group 1 furnace* or existing *in-line fluxer* is considered an *emission unit* within a *secondary aluminum processing unit*. A new SAPU means any combination of *group 1 furnaces* and *in-line fluxers* which are simultaneously constructed after February 11, 1999. Each of the *group 1 furnaces* or *in-line fluxers* within a new SAPU is considered an *emission unit* within that *secondary aluminum processing unit*.

*Secondary aluminum production facility* means any establishment using clean charge, post-consumer aluminum scrap, aluminum scrap, aluminum ingots, aluminum foundry returns, dross from aluminum production, or molten aluminum as the raw material and performing one or more of the following processes: scrap shredding, scrap drying/delacquering/decoating, thermal chip drying, furnace operations (i.e., melting, holding, refining, fluxing, or alloying), in-line fluxing, or dross cooling. A *secondary aluminum production facility* may be independent or part of a primary aluminum production facility. A facility is a *secondary aluminum production facility* if it includes any of the affected sources listed in § 63.1500(b) or (c). Aluminum die casting facilities, aluminum foundries and aluminum extrusion facilities that process no materials other than materials generated within the facility, or clean charge purchased or otherwise obtained from outside the facility, and that do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns are not secondary aluminum production facilities.

*Sidewell* means an open well adjacent to the hearth of a furnace with connecting arches between the hearth and the open well through which molten aluminum is circulated between the hearth, where heat is applied by burners, and the open well, which is used for charging scrap and solid flux or salt to the furnace, injecting fluxing agents, and skimming dross.

*Sweat furnace* means a furnace used exclusively to reclaim aluminum from scrap that contains substantial quantities of iron by using heat to separate the low-melting point aluminum from

the scrap while the higher melting-point iron remains in solid form.

*TEQ* means the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, NTIS no. PB 90-145756.

*THC* means, for the purposes of this subpart, total hydrocarbon emissions that also serve as a surrogate for the emissions of organic HAP compounds.

*Thermal chip dryer* means a device that uses heat to evaporate water, oil, or oil/water mixtures from unpainted/uncoated aluminum chips.

*Three-day, 24-hour rolling average* means daily calculations of the average 24-hour emission rate (lbs/ton of feed/charge), over the 3 most recent consecutive 24-hour periods, for a secondary aluminum processing unit.

*Total reactive chlorine flux injection rate* means the sum of the total weight of chlorine in the gaseous or liquid reactive flux and the total weight of chlorine in the solid reactive chloride flux, divided by the total weight of feed/charge, as determined by the procedure in § 63.1512(o).

#### § 63.1504 [Reserved]

#### EMISSION STANDARDS AND OPERATING REQUIREMENTS

#### § 63.1505 Emission standards for affected sources and emission units.

(a) *Summary.* The owner or operator of a new or existing affected source must comply with each applicable limit in this section. Table 1 to this subpart summarizes the emission standards for each type of source.

(b) *Aluminum scrap shredder.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of an aluminum scrap shredder at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere:

(1) Emissions in excess of 0.023 grams (g) of PM per dry standard cubic meter (dscm) (0.010 grain (gr) of PM per dry standard cubic foot (dscf)); and

(2) Visible emissions (VE) in excess of 10 percent opacity from any PM add-on air pollution control device if a continuous opacity monitor (COM) or visible emissions monitoring is chosen as the monitoring option.

(c) *Thermal chip dryer.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of a thermal chip dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of:

(1) 0.40 kilogram (kg) of THC, as propane, per megagram (Mg) (0.80 lb of THC, as propane, per ton) of feed/charge from a thermal chip dryer at a secondary aluminum production facility that is a major source; and

(2) 2.50 micrograms (µg) of D/F TEQ per Mg ( $3.5 \times 10^{-5}$  gr per ton) of feed/charge from a thermal chip dryer at a secondary aluminum production facility that is a major or area source.

(d) *Scrap dryer/delacquering kiln/decoating kiln.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier:

(1) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln must not discharge or cause to be discharged to the atmosphere emissions in excess of:

(i) 0.03 kg of THC, as propane, per Mg (0.06 lb of THC, as propane, per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(ii) 0.04 kg of PM per Mg (0.08 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(iii) 0.25 µg of D/F TEQ per Mg ( $3.5 \times 10^{-6}$  gr of D/F TEQ per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major or area source; and

(iv) 0.40 kg of HCl per Mg (0.80 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a

secondary aluminum production facility that is a major source.

(2) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(e) *Scrap dryer/delacquering kiln/decoating kiln: alternative limits.* The owner or operator of a scrap dryer/delacquering kiln/decoating kiln may choose to comply with the emission limits in this paragraph as an alternative to the limits in paragraph (d) of this section if the scrap dryer/delacquering kiln/decoating kiln is equipped with an afterburner having a design residence time of at least 1 second and the afterburner is operated at a temperature of at least 750 °C (1400 °F) at all times. On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier:

(1) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln must not discharge or cause to be discharged to the atmosphere emissions in excess of:

(i) 0.10 kg of THC, as propane, per Mg (0.20 lb of THC, as propane, per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(ii) 0.15 kg of PM per Mg (0.30 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source;

(iii) 5.0 µg of D/F TEQ per Mg ( $7.0 \times 10^{-5}$  gr of D/F TEQ per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major or area source; and

(iv) 0.75 kg of HCl per Mg (1.50 lb per ton) of feed/charge from a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production facility that is a major source.

(2) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln at a secondary aluminum production

facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(f) *Sweat furnace.* The owner or operator of a sweat furnace shall comply with the emission standard of paragraph (f)(2) of this section.

(1) The owner or operator is not required to conduct a performance test to demonstrate compliance with the emission standard of paragraph (f)(2) of this section, provided that, on and after the compliance date of this rule, the owner or operator operates and maintains an afterburner with a design residence time of two seconds or greater and an operating temperature of 1600 °F or greater.

(2) On and after the date the initial performance test is conducted or required to be conducted, or if no compliance test is required, on and after the compliance date of this rule, whichever date is earlier, the owner or operator of a sweat furnace at a secondary aluminum production facility that is a major or area source must not discharge or cause to be discharged to the atmosphere emissions in excess of 0.80 nanogram (ng) of D/F TEQ per dscm ( $3.5 \times 10^{-10}$  gr per dscf) at 11 percent oxygen (O<sub>2</sub>).

(g) *Dross-only furnace.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of a dross-only furnace at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere:

(1) Emissions in excess of 0.15 kg of PM per Mg (0.30 lb of PM per ton) of feed/charge.

(2) Visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(h) *Rotary dross cooler.* On and after the date the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator of a rotary dross cooler at a

secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere:

(1) Emissions in excess of 0.09 g of PM per dscm (0.04 gr per dscf).

(2) Visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(i) *Group 1 furnace.* The owner or operator of a group 1 furnace must use the limits in this paragraph to determine the emission standards for a SAPU.

(1) 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge from a group 1 furnace, that is not a melting/holding furnace processing only clean charge, at a secondary aluminum production facility that is a major source;

(2) 0.40 kg of PM per Mg (0.80 lb of PM per ton) of feed/charge from a group 1 melting/holding furnace processing only clean charge at a secondary aluminum production facility that is a major source;

(3) 15  $\mu\text{g}$  of D/F TEQ per Mg ( $2.1 \times 10^{-4}$  gr of D/F TEQ per ton) of feed/charge from a group 1 furnace at a secondary aluminum production facility that is a major or area source. This limit does not apply if the furnace processes only clean charge; and

(4) 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight, for a group 1 furnace at a secondary aluminum production facility that is a major source.

(5) The owner or operator of a group 1 furnace at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device if a COM is chosen as the monitoring option.

(6) The owner or operator may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge.

(7) The owner or operator of a sidewall group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewall at times when the level of molten metal falls below the top of the passage between the sidewall and the hearth, must comply with the emission limits of paragraphs (j)(1) through (j)(4) of this section on the basis of the combined emissions from the sidewall and the hearth.

(j) *In-line fluxer.* Except as provided in paragraph (j)(3) of this section for an in-line fluxer using no reactive flux material, the owner or operator of an in-line fluxer must use the limits in this paragraph to determine the emission standards for a SAPU.

(1) 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge;

(2) 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge.

(3) The emission limits in paragraphs (j)(1) and (j)(2) of this section do not apply to an in-line fluxer that uses no reactive flux materials.

(4) The owner or operator of an in-line fluxer at a secondary aluminum production facility that is a major source must not discharge or cause to be discharged to the atmosphere visible emissions in excess of 10 percent opacity from any PM add-on air pollution control device used to control emissions from the in-line fluxer, if a COM is chosen as the monitoring option.

(5) The owner or operator may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge.

(k) *Secondary aluminum processing unit.* On and after the date of approval of the operation, maintenance and monitoring (OM&M) plan, the owner or operator must comply with the emission limits calculated using the equations for PM and HCl in paragraphs (k)(1) and (k)(2) of this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major source. The owner or operator must comply with the emission limit calculated using the equation for D/F in paragraph (k)(3) of

§ 63.1506

40 CFR Ch. I (7–1–00 Edition)

this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major or area source.

(1) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of:

$$L_{C_{PM}} = \frac{\sum_{i=1}^n (L_{ti_{PM}} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 1})$$

Where,

$L_{ti_{PM}}$  = The PM emission limit for individual emission unit  $i$  in paragraph (i)(1) and (2) of this section for a group 1 furnace or in paragraph (j)(2) of this section for an in-line fluxer;

$T_{ti}$  = The feed/charge rate for individual emission unit  $i$ ; and

$L_{C_{PM}}$  = The PM emission limit for the secondary aluminum processing unit.

NOTE: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

(2) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl in excess of:

$$L_{C_{HCl}} = \frac{\sum_{i=1}^n (L_{ti_{HCl}} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 2})$$

Where,

$L_{ti_{HCl}}$  = The HCl emission limit for individual emission unit  $i$  in paragraph (i)(4) of this section for a group 1 furnace or in paragraph (j)(1) of this section for an in-line fluxer; and

$L_{C_{HCl}}$  = The HCl emission limit for the secondary aluminum processing unit.

NOTE: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

(3) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour roll-

ing average emissions of D/F in excess of:

$$L_{C_{D/F}} = \frac{\sum_{i=1}^n (L_{ti_{D/F}} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 3})$$

Where,

$L_{ti_{D/F}}$  = The D/F emission limit for individual emission unit  $i$  in paragraph (i)(3) of this section for a group 1 furnace; and

$L_{C_{D/F}}$  = The D/F emission limit for the secondary aluminum processing unit.

NOTE: Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

(4) The owner or operator of a SAPU at a secondary aluminum production facility that is a major source may demonstrate compliance with the emission limits of paragraphs (k)(1) through (3) of this section by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of paragraphs (i) and (j) of this section.

(5) The owner or operator of a SAPU at a secondary aluminum production facility that is an area source may demonstrate compliance with the emission limits of paragraph (k)(3) of this section by demonstrating that each emission unit within the SAPU is in compliance with the emission limit of paragraph (i)(3) of this section.

§ 63.1506 Operating requirements.

(a) *Summary.* (1) On and after the date on which the initial performance test is conducted or required to be conducted, whichever date is earlier, the owner or operator must operate all new and existing affected sources and control equipment according to the requirements in this section.

(2) The completion of the initial performance tests for SAPUs shall be considered to be the date of approval of the OM&M plan by the permitting authority.

(3) The owner or operator of an existing sweat furnace that meets the specifications of § 63.1505(f)(1) must operate the sweat furnace and control equipment according to the requirements of

this section on and after the compliance date of this standard.

(4) The owner or operator of a new sweat furnace that meets the specifications of § 63.1505(f)(1) must operate the sweat furnace and control equipment according to the requirements of this section by March 23, 2000 or upon start-up, whichever is later.

(5) Operating requirements are summarized in Table 2 to this subpart.

(b) *Labeling.* The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

(1) The type of affected source or emission unit (*e.g.*, scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).

(2) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (*e.g.*, clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

(3) The afterburner operating temperature and design residence time for a scrap dryer/delacquering kiln/decoating kiln.

(c) *Capture/collection systems.* For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

(1) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference in § 63.1502 of this subpart);

(2) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

(3) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

(d) *Feed/charge weight.* The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

(1) Except as provided in paragraph (d)(3) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

(2) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

(3) The owner or operator may choose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

(i) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

(ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

(e) *Aluminum scrap shredder.* The owner or operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system, or a continuous opacity monitor, or conduct visible emissions observations.

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510, the owner or operator must:

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If



corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in §63.1510, the owner or operator must initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(3) If visible emission observations are used to meet the monitoring requirements in §63.1510, the owner or operator must initiate corrective action within 1-hour of any observation of visible emissions during a daily visible emissions test and complete the corrective action procedures in accordance with the OM&M plan.

(f) *Thermal chip dryer.* The owner or operator of a thermal chip dryer with emissions controlled by an afterburner must:

(1) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

(2) Operate each afterburner in accordance with the OM&M plan.

(3) Operate each thermal chip dryer using only unpainted aluminum chips as the feedstock.

(g) *Scrap dryer/delacquering kiln/decoating kiln.* The owner or operator of a scrap dryer/delacquering kiln/decoating kiln with emissions controlled by an afterburner and a lime-injected fabric filter must:

(1) For each afterburner,

(i) Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.

(ii) Operate each afterburner in accordance with the OM&M plan.

(2) If a bag leak detection system is used to meet the fabric filter monitoring requirements in §63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system

alarm and complete any necessary corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(3) If a continuous opacity monitoring system is used to meet the monitoring requirements in §63.1510, initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(4) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).

(5) For a continuous injection device, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(h) *Sweat furnace.* The owner or operator of a sweat furnace with emissions controlled by an afterburner must:

(1) Maintain the 3-hour block average operating temperature of each afterburner at or above:

(i) The average temperature established during the performance test; or

(ii) 1600 °F if a performance test was not conducted, and the afterburner meets the specifications of §63.1505(f)(1).

(2) Operate each afterburner in accordance with the OM&M plan.

(i) *Dross-only furnace.* The owner or operator of a dross-only furnace with emissions controlled by a fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(3) Operate each furnace using dross as the sole feedstock.

(j) *Rotary dross cooler.* The owner or operator of a rotary dross cooler with emissions controlled by a fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator

takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(k) *In-line fluxer.* The owner or operator of an in-line fluxer with emissions controlled by a lime-injected fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510,

(i) Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan.

(ii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.

(3) For a continuous injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.

(4) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the

performance test at or below the average rate established during the performance test.

(l) *In-line fluxer using no reactive flux material.* The owner or operator of a new or existing in-line fluxer using no reactive flux materials must operate each in-line fluxer using no reactive flux materials.

(m) *Group 1 furnace with add-on air pollution control devices.* The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

(1) If a bag leak detection system is used to meet the monitoring requirements in § 63.1510, the owner or operator must:

(i) Initiate corrective action within 1 hour of a bag leak detection system alarm.

(ii) Complete the corrective action procedures in accordance with the OM&M plan.

(iii) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

(2) If a continuous opacity monitoring system is used to meet the monitoring requirements in § 63.1510, the owner or operator must:

(i) Initiate corrective action within 1 hour of any 6-minute average reading of 5 percent or more opacity; and

(ii) Complete the corrective action procedures in accordance with the OM&M plan.

(3) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).

(4) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all

times and maintain the lime feeder setting at the same level established during the performance test.

(5) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

(6) Operate each sidewall furnace such that:

(i) The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

(ii) Reactive flux is added only in the sidewall unless the hearth also is equipped with an add-on control device.

(n) *Group 1 furnace without add-on air pollution control devices.* The owner or operator of a group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices must:

(1) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

(2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

(3) Operate each group 1 melting/holding furnace subject to the emission standards in § 63.1505(i)(2) using only clean charge as the feedstock.

(o) *Group 2 furnace.* The owner or operator of a new or existing group 2 furnace must:

(1) Operate each furnace using only clean charge as the feedstock.

(2) Operate each furnace using no reactive flux.

(p) *Corrective action.* When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source

or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

**§§ 63.1507–63.1509 [Reserved]**

MONITORING AND COMPLIANCE  
REQUIREMENTS

**§ 63.1510 Monitoring requirements.**

(a) *Summary.* On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to this subpart.

(b) *Operation, maintenance, and monitoring (OM&M) plan.* The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator must submit the plan to the applicable permitting authority for review and approval as part of the application for a part 70 or part 71 permit. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

(1) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.

(2) A monitoring schedule for each affected source and emission unit.

(3) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in § 63.1505.

(4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:

(i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

(ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.

(5) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.

(6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:

(i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and

(ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.

(7) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in paragraph (o) of this section for each group 1 furnace not equipped with an add-on air pollution control device.

(c) *Labeling.* The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational

standard in § 63.1506(b) are intact and legible.

(d) *Capture/collection system.* The owner or operator must:

(1) Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and

(2) Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in § 63.1506(c) and record the results of each inspection.

(e) *Feed/charge weight.* The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

(1) The accuracy of the weight measurement device or procedure must be ±1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.

(2) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(f) *Fabric filters and lime-injected fabric filters.* The owner or operator of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of this subpart must install, calibrate, maintain, and continuously operate a bag leak detection system as required in paragraph (f)(1) of this section or a continuous opacity monitoring system as required in paragraph (f)(2) of this section. The owner or operator of an aluminum scrap shredder must install and operate a bag leak detection system as required in paragraph (f)(1) of this section, install and operate a continuous opacity monitoring system as required in paragraph (f)(2) of this section, or conduct visible emission observations as required in paragraph (f)(3) of this section.

(1) These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

(i) The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

(ii) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(iv) The bag leak detection system sensor must provide output of relative or absolute PM loadings.

(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(vi) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(vii) For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(ix) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

(x) Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

(2) These requirements apply to the owner or operator of a new or existing affected source or an existing emission unit using a continuous opacity monitoring system.

(i) The owner or operator must install, calibrate, maintain, and operate a continuous opacity monitoring system to measure and record the opacity of emissions exiting each exhaust stack.

(ii) Each continuous opacity monitoring system must meet the design and installation requirements of Performance Specification 1 in appendix B to 40 CFR part 60.

(3) These requirements apply to the owner or operator of a new or existing aluminum scrap shredder who conducts visible emission observations. The owner or operator must:

(i) Perform a visible emissions test for each aluminum scrap shredder using a certified observer at least once a day according to the requirements of Method 9 in appendix A to 40 CFR part 60. Each Method 9 test must consist of five 6-minute observations in a 30-minute period; and

(ii) Record the results of each test.

(g) *Afterburner.* These requirements apply to the owner or operator of an affected source using an afterburner to comply with the requirements of this subpart.

(1) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in subpart A of this part.

(2) The temperature monitoring device must meet each of these performance and equipment specifications:

(i) The temperature monitoring device must be installed at the exit of the combustion zone of each afterburner.

(ii) The monitoring system must record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.

(iii) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in § 63.1512(m).

(iv) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(3) The owner or operator must conduct an inspection of each afterburner at least once a year and record the results. At a minimum, an inspection must include:

(i) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;

- (ii) Inspection for proper adjustment of combustion air;
- (iii) Inspection of internal structures (e.g., baffles) to ensure structural integrity;
- (iv) Inspection of dampers, fans, and blowers for proper operation;
- (v) Inspection for proper sealing;
- (vi) Inspection of motors for proper operation;
- (vii) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;
- (viii) Inspection of afterburner shell for corrosion and/or hot spots;
- (ix) Documentation, for the burn cycle that follows the inspection, that the afterburner is operating properly and any necessary adjustments have been made; and
- (x) Verification that the equipment is maintained in good operating condition.
- (xi) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.
- (h) *Fabric filter inlet temperature.* These requirements apply to the owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter to comply with the requirements of this subpart.
  - (1) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in subpart A of this part.
  - (2) The temperature monitoring device must meet each of these performance and equipment specifications:
    - (i) The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
    - (ii) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in § 63.1512(n).
    - (iii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or al-

ternate reference, subject to approval by the Administrator.

(i) *Lime injection.* These requirements apply to the owner or operator of an affected source or emission unit using a lime-injected fabric filter to comply with the requirements of this subpart.

(1) The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:

(i) Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or

(ii) Subject to the approval of the permitting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the owner or operator must promptly initiate and complete corrective action, or

(iii) Subject to the approval of the permitting agency, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the owner or operator must promptly initiate and complete corrective action.

(2) The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.

(3) An owner or operator who intermittently adds lime to a lime coated fabric filter must obtain approval from the permitting authority for a lime addition monitoring procedure. The permitting authority will not approve a monitoring procedure unless data and information are submitted establishing that the procedure is adequate to ensure that relevant emission standards will be met on a continuous basis.

(j) *Total reactive flux injection rate.* These requirements apply to the owner or operator of a group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer. The owner or operator must:

(1) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit.

(i) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.

(ii) The accuracy of the weight measurement device must be  $\pm 1$  percent of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of  $\pm 1$  percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.

(iii) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(2) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in § 63.1512(o).

(3) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:

(i) Gaseous or liquid reactive flux other than chlorine; and

(ii) Solid reactive flux.

(4) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the

performance test using the procedure in § 63.1512(o).

(5) The owner or operator of a group 1 furnace or in-line fluxer performing reactive fluxing may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

(k) *Thermal chip dryer.* These requirements apply to the owner or operator of a thermal chip dryer with emissions controlled by an afterburner. The owner or operator must:

(1) Record the type of materials charged to the unit for each operating cycle or time period used in the performance test.

(2) Submit a certification of compliance with the applicable operational standard for charge materials in § 63.1506(f)(3) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(i).

(l) *Dross-only furnace.* These requirements apply to the owner or operator of a dross-only furnace. The owner or operator must:

(1) Record the materials charged to each unit for each operating cycle or time period used in the performance test.

(2) Submit a certification of compliance with the applicable operational standard for charge materials in § 63.1506(i)(3) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(ii).

(m) *In-line fluxers using no reactive flux.* The owner or operator of an in-line fluxer that uses no reactive flux materials must submit a certification of compliance with the operational standard for no reactive flux materials in § 63.1506(l) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(vi).



(n) *Sidewell group 1 furnace with add-on air pollution control devices.* These requirements apply to the owner or operator of a sidewell group 1 furnace using add-on air pollution control devices. The owner or operator must:

(1) Record in an operating log for each charge of a sidewell furnace that the level of molten metal was above the top of the passage between the sidewell and hearth during reactive flux injection, unless the furnace hearth was also equipped with an add-on control device.

(2) Submit a certification of compliance with the operational standards in § 63.1506(m)(7) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(iii).

(o) *Group 1 furnace without add-on air pollution control devices.* These requirements apply to the owner or operator of a group 1 furnace that is not equipped with an add-on air pollution control device.

(1) The owner or operator must develop, in consultation with the applicable permitting authority, a written site-specific monitoring plan. The site-specific monitoring plan must be part of the OM&M plan that addresses monitoring and compliance requirements for PM, HCl, and D/F emissions.

(i) The owner or operator of an existing affected source must submit the site-specific monitoring plan to the applicable permitting authority for review at least 6 months prior to the compliance date.

(ii) The permitting authority will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limits and demonstrates, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. Subject to permitting agency approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge

materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

(2) Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.

(3) Each site-specific monitoring plan must include provisions for unit labeling as required in paragraph (c) of this section, feed/charge weight measurement (or production weight measurement) as required in paragraph (e) of this section and flux weight measurement as required in paragraph (j) of this section.

(4) Each site-specific monitoring plan for a melting/holding furnace subject to the clean charge emission standard in § 63.1505(i)(3) must include these requirements:

(i) The owner or operator must record the type of feed/charge (e.g., ingot, thermally dried chips, dried scrap, etc.) for each operating cycle or time period used in the performance test; and

(ii) The owner or operator must submit a certification of compliance with the applicable operational standard for clean charge materials in § 63.1506(n)(3) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(iv).

(5) If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in subpart A of this part.

(6) If a continuous opacity monitoring system is included in a site-specific monitoring plan, the plan must include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of this subpart.

(7) If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation

of the program in accordance with all applicable requirements in paragraph (p) of this section.

(8) If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in paragraph (q) of this section.

(p) *Scrap inspection program for group 1 furnace without add-on air pollution control devices.* A scrap inspection program must include:

(1) A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;

(2) A scrap inspector training program;

(3) An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;

(4) Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;

(5) A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and

(6) Recordkeeping requirements to document conformance with plan requirements.

(q) *Monitoring of scrap contamination level by calculation method for group 1 furnace without add-on air pollution control devices.* The owner or operator of a group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented) may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:

(1) Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.

(2) Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.

(3) Operating, monitoring, record-keeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.

(r) *Group 2 furnace.* These requirements apply to the owner or operator of a new or existing group 2 furnace. The owner or operator must:

(1) Record a description of the materials charged to each furnace, including any nonreactive, non-HAP-containing/non-HAP-generating fluxing materials or agents.

(2) Submit a certification of compliance with the applicable operational standard for charge materials in § 63.1506(o) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(v).

(s) *Site-specific requirements for secondary aluminum processing units.* (1) An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with § 63.1510(b), the following information:

(i) The identification of each emission unit in the secondary aluminum processing unit;

(ii) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;

(iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;

(iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and

(v) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in § 63.1510(t).

(2) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:

(i) Any averaging among emissions of differing pollutants;

(ii) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;

(iii) The inclusion of any emission unit while it is shutdown; or

(iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

(3) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the owner or operator must submit a request to the applicable permitting authority containing the information required by paragraph (s)(1) of this section and obtain approval of the applicable permitting authority prior to implementing any revisions.

(t) *Secondary aluminum processing unit.* Except as provided in paragraph (u) of this section, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

(1) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in paragraph (e) of this section. If the owner or operator chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.

(2) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit

for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds.

(3) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.

(4) Compute the 24-hour daily emission rate using Equation 4:

$$E_{\text{day}} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n T_i} \quad (\text{Eq. 4})$$

Where,

$E_{\text{day}}$  = The daily PM, HCl, or D/F emission rate for the secondary aluminum processing unit for the 24-hour period;

$T_i$  = The total amount of feed, or aluminum produced, for emission unit  $i$  for the 24-hour period (tons);

$ER_i$  = The measured emission rate for emission unit  $i$  as determined in the performance test (lb/ton or  $\mu\text{g}/\text{Mg}$  of feed/charge); and

$n$  = The number of emission units in the secondary aluminum processing unit.

(5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.

(u) *Secondary aluminum processing unit compliance by individual emission unit demonstration.* As an alternative to the procedures of paragraph (t) of this section, an owner or operator may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.

(v) *Alternative monitoring method for lime addition.* The owner or operator of a lime-coated fabric filter that employs intermittent or noncontinuous lime addition may apply to the Administrator for approval of an alternative method

for monitoring the lime addition schedule and rate based on monitoring the weight of lime added per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.

(w) *Alternative monitoring methods.* An owner or operator may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, subject to the provisions of paragraphs (w)(1) through (6) of this section.

(1) The Administrator will not approve averaging periods other than those specified in this section.

(2) The owner or operator must continue to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure.

(3) The owner or operator shall submit the application for approval of alternate monitoring methods no later than the notification of the performance test. The application must contain the information specified in paragraphs (w)(3) (i) through (iii) of this section:

(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(ii) A description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated; and

(iii) Data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s).

(4) The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard(s). Before disapproving any alternate monitoring application, the Administrator will provide:

(i) Notice of the information and findings upon which the intended disapproval is based; and

(ii) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide additional supporting information.

(5) The owner or operator is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of this subpart.

(6) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

**§ 63.1511 Performance test/compliance demonstration general requirements.**

(a) *Site-specific test plan.* Prior to conducting a performance test required by this subpart, the owner or operator must prepare and submit a site-specific test plan meeting the requirements in § 63.7(c).

(b) *Initial performance test.* Following approval of the site-specific test plan, the owner or operator must demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in § 63.1515(b). The owner or operator must conduct each performance test according to the requirements of the general provisions in subpart A of this part and this subpart. Owners or operators of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to D/F. Owners or operators of sweat furnaces meeting the specifications of

§ 63.1505(f)(1) are not required to conduct a performance test.

(1) The owner or operator must conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate.

(2) Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours.

(3) Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle.

(4) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted over a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.

(5) Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

(c) *Test methods.* The owner or operator must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards:

(1) Method 1 for sample and velocity traverses.

(2) Method 2 for velocity and volumetric flow rate.

(3) Method 3 for gas analysis.

(4) Method 4 for moisture content of the stack gas.

(5) Method 5 for the concentration of PM.

(6) Method 9 for visible emission observations.

(7) Method 23 for the concentration of D/F.

(8) Method 25A for the concentration of THC, as propane.

(9) Method 26A for the concentration of HCl. Where a lime-injected fabric filter is used as the control device to comply with the 90 percent reduction standard, the owner or operator must measure the fabric filter inlet concentration of HCl at a point before lime is introduced to the system.

(d) *Alternative methods.* The owner or operator may use an alternative test method, subject to approval by the Administrator.

(e) *Repeat tests.* The owner or operator of new or existing affected sources and emission units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

(f) *Testing of representative emission units.* With the approval of the permitting authority, a single representative or similar group 1 furnace or in-line fluxer which is not controlled by an add-on control device may be tested to determine the emission rate of all like affected sources at a facility provided that:

(1) The tested emission unit must use identical feed/charge and flux materials in the same proportions as the emission units that it represents;

(2) The tested emission unit is subject to the same work practices and the emission units that it represents;

(3) The tested emission unit is of the same design as the emission units that it represents;

(4) The tested emission unit is tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents;

(5) At least one of each different style of emission unit at the facility is tested; and

(6) All add-on control devices are tested.

(g) *Establishment of monitoring and operating parameter values.* The owner or operator of new or existing affected sources and emission units must establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by § 63.1510 that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator must

use the appropriate procedures in this section and submit the information required by § 63.1515(b)(4) in the notification of compliance status report. The owner or operator may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the applicable permitting authority:

(1) The complete emission test report(s) used as the basis of the parameter(s) is submitted.

(2) The same test methods and procedures as required by this subpart were used in the test.

(3) The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.

(4) All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.

**§ 63.1512 Performance test/compliance demonstration requirements and procedures.**

(a) *Aluminum scrap shredder.* The owner or operator must conduct performance tests to measure PM emissions at the outlet of the control system. If visible emission observations is the selected monitoring option, the owner or operator must record visible emission observations from each exhaust stack for all consecutive 6-minute periods during the PM emission test according to the requirements of Method 9 in appendix A to 40 CFR part 60.

(b) *Thermal chip dryer.* The owner or operator must conduct a performance test to measure THC and D/F emissions at the outlet of the control device while the unit processes only unpainted aluminum chips.

(c) *Scrap dryer/delacquering kiln/decoating kiln.* The owner or operator must conduct performance tests to measure emissions of THC, D/F, HCl, and PM at the outlet of the control device.

(1) If the scrap dryer/delacquering kiln/decoating kiln is subject to the alternative emission limits in § 63.1505(e),

the average afterburner operating temperature in each 3-hour block period must be maintained at or above 760 °C (1400 °F) for the test.

(2) The owner or operator of a scrap dryer/delacquering kiln/decoating kiln subject to the alternative limits in § 63.1505(e) must submit a written certification in the notification of compliance status report containing the information required by § 63.1515(b)(7).

(d) *Group 1 furnace with add-on air pollution control devices.* (1) The owner or operator of a group 1 furnace that processes scrap other than clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM and D/F at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

(2) The owner or operator of a group 1 furnace that processes only clean charge materials with emissions controlled by a lime-injected fabric filter must conduct performance tests to measure emissions of PM at the outlet of the control device and emissions of HCl at the outlet (for the emission limit) or the inlet and the outlet (for the percent reduction standard).

(3) The owner or operator may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

(4) The owner or operator of a sidewall group 1 furnace that conducts reactive fluxing (except for cover flux) in the hearth, or that conducts reactive fluxing in the sidewall at times when the level of molten metal falls below the top of the passage between the sidewall and the hearth, must conduct the performance tests required by paragraph (d)(1) or (d)(2) of this section, to measure emissions from both the sidewall and the hearth.

(e) *Group 1 furnace (including melting holding furnaces) without add-on air pollution control devices.* In the site-specific monitoring plan required by

§63.1510(o), the owner or operator of a group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices must include data and information demonstrating compliance with the applicable emission limits.

(1) If the group 1 furnace processes other than clean charge material, the owner or operator must conduct emission tests to measure emissions of PM, HCl, and D/F at the furnace exhaust outlet.

(2) If the group 1 furnace processes only clean charge, the owner or operator must conduct emission tests to simultaneously measure emissions of PM and HCl at the furnace exhaust outlet. A D/F test is not required. Each test must be conducted while the group 1 furnace (including a melting/holding furnace) processes only clean charge.

(3) The owner or operator may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

(f) *Sweat furnace.* Except as provided in §63.1505(f)(1), the owner or operator must measure emissions of D/F from each sweat furnace at the outlet of the control device.

(g) *Dross-only furnace.* The owner or operator must conduct a performance test to measure emissions of PM from each dross-only furnace at the outlet of each control device while the unit processes only dross.

(h) *In-line fluxer.* (1) The owner or operator must conduct a performance test to measure emissions of HCl and PM. If the in-line fluxer is equipped with an add-on control device, the emissions must be measured at the outlet of the control device. If the in-line fluxer uses no reactive flux materials, emission tests for PM and HCl are not required.

(2) The owner or operator may choose to determine the rate of reactive flux addition to the in-line fluxer and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux

added to the in-line fluxer is emitted. Under these circumstances, the owner or operator is not required to conduct an emission test for HCl.

(i) *Rotary dross cooler.* The owner or operator must conduct a performance test to measure PM emissions at the outlet of the control device.

(j) *Secondary aluminum processing unit.* The owner or operator must conduct performance tests as described in paragraphs (j)(1) through (3) of this section. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and µg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in §63.1510(t). A performance test is required for:

(1) Each group 1 furnace processing only clean charge to measure emissions of PM and either:

(i) Emissions of HCl (for the emission limit); or

(ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

(2) Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either:

(i) Emissions of HCl (for the emission limit); or

(ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard).

(3) Each in-line fluxer to measure emissions of PM and HCl.

(k) *Feed/charge weight measurement.* During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the owner or operator of an affected source or emission unit, subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, must measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the three test runs and calculate and record the total weight. An owner or operator that chooses to demonstrate

compliance on the basis of the aluminum production weight must measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.

(l) *Continuous opacity monitoring system.* The owner or operator of an affected source or emission unit using a continuous opacity monitoring system must conduct a performance evaluation to demonstrate compliance with Performance Specification 1 in appendix B to 40 CFR part 60. Following the performance evaluation, the owner or operator must measure and record the opacity of emissions from each exhaust stack for all consecutive 6-minute periods during the PM emission test.

(m) *Afterburner.* These requirements apply to the owner or operator of an affected source using an afterburner to comply with the requirements of this subpart.

(1) Prior to the initial performance test, the owner or operator must conduct a performance evaluation for the temperature monitoring device according to the requirements of § 63.8.

(2) The owner or operator must use these procedures to establish an operating parameter value or range for the afterburner operating temperature.

(i) Continuously measure and record the operating temperature of each afterburner every 15 minutes during the THC and D/F performance tests;

(ii) Determine and record the 15-minute block average temperatures for the three test runs; and

(iii) Determine and record the 3-hour block average temperature measurements for the 3 test runs.

(n) *Inlet gas temperature.* The owner or operator of a scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter must use these procedures to establish an operating parameter value or range for the inlet gas temperature.

(1) Continuously measure and record the temperature at the inlet to the lime-injected fabric filter every 15 minutes during the HCl and D/F performance tests;

(2) Determine and record the 15-minute block average temperatures for the 3 test runs; and

(3) Determine and record the 3-hour block average of the recorded temperature measurements for the 3 test runs.

(o) *Flux injection rate.* The owner or operator must use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate.

(1) Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs;

(2) Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs;

(3) Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using Equation 5:

$$W_t = F_1 W_1 + F_2 W_2 \quad (\text{Eq. 5})$$

Where,

$W_t$  = Total chlorine usage, by weight;

$F_1$  = Fraction of gaseous or liquid flux that is chlorine;

$W_1$  = Weight of reactive flux gas injected;

$F_2$  = Fraction of solid reactive chloride flux that is chlorine (e.g.,  $F = 0.75$  for magnesium chloride; and

$W_2$  = Weight of solid reactive flux;

(4) Divide the weight of total chlorine usage ( $W_t$ ) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and

(5) If a solid reactive flux other than magnesium chloride is used, the owner or operator must derive the appropriate proportion factor subject to approval by the applicable permitting authority.

(p) *Lime injection.* The owner or operator of an affected source or emission unit using a lime-injected fabric filter system must use these procedures during the HCl and D/F tests to establish an operating parameter value for the feeder setting for each operating cycle or time period used in the performance test.



### § 63.1513

### 40 CFR Ch. I (7-1-00 Edition)

(1) For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times; and

(2) Record the feeder setting for the 3 test runs. If the feed rate setting varies during the runs, determine and record the average feed rate from the 3 runs.

(q) *Bag leak detection system.* The owner or operator of an affected source or emission unit using a bag leak detection system must submit the information described in § 63.1515(b)(6) as part of the notification of compliance status report to document conformance with the specifications and requirements in § 63.1510(f).

(r) *Labeling.* The owner or operator of each scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace and in-line fluxer must submit the information described in § 63.1515(b)(3) as part of the notification of compliance status report to document conformance with the operational standard in § 63.1506(b).

(s) *Capture/collection system.* The owner or operator of a new or existing affected source or emission unit with an add-on control device must submit the information described in § 63.1515(b)(2) as part of the notification of compliance status report to document conformance with the operational standard in § 63.1506(c).

#### § 63.1513 Equations for determining compliance.

(a) *THC emission limit.* Use Equation 6 to determine compliance with an emission limit for THC:

$$E = \frac{C \times MW \times Q \times K_1 \times K_2}{M_v \times P \times 10^6} \quad (\text{Eq. 6})$$

Where,

E = Emission rate of measured pollutant, kg/Mg (lb/ton) of feed;

C = Measured volume fraction of pollutant, ppmv;

MW = Molecular weight of measured pollutant, g/g-mole (lb/lb-mole): THC (as propane) = 44.11;

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);

K<sub>1</sub> = Conversion factor, 1 kg/1,000 g (1 lb/lb);

K<sub>2</sub> = Conversion factor, 1,000 L/m<sup>3</sup> (1 ft<sup>3</sup>/ft<sup>3</sup>);

M<sub>v</sub> = Molar volume, 24.45 L/g-mole (385.3 ft<sup>3</sup>/lb-mole); and

P = Production rate, Mg/hr (ton/hr).

(b) *PM, HCl and D/F emission limits.* Use Equation 7 to determine compliance with an emission limit for PM, HCl, and D/F:

$$E = \frac{C \times Q \times K_1}{P} \quad (\text{Eq. 7})$$

Where,

E = Emission rate of PM, HCl, or D/F, kg/Mg (lb/ton) of feed;

C = Concentration of PM, HCl, or D/F, g/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);

K<sub>1</sub> = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and

P = Production rate, Mg/hr (ton/hr).

(c) *HCl percent reduction standard.* Use Equation 8 to determine compliance with an HCl percent reduction standard:

$$\%R = \frac{L_i - L_o}{L_i} \times 100 \quad (\text{Eq. 8})$$

Where,

%R = Percent reduction of the control device;

L<sub>i</sub> = Inlet loading of pollutant, kg/Mg (lb/ton); and

L<sub>o</sub> = Outlet loading of pollutant, kg/Mg (lb/ton).

(d) *Conversion of D/F measurements to TEQ units.* To convert D/F measurements to TEQ units, the owner or operator must use the procedures and equations in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), incorporated by reference in § 63.1502 of this subpart, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.

(e) *Secondary aluminum processing unit.* Use the procedures in paragraphs (e)(1), (2), and (3) or the procedure in paragraph (e)(4) of this section to determine compliance with emission limits for a secondary aluminum processing unit.

(1) Use Equation 9 to compute the mass-weighted PM emissions for a secondary aluminum processing unit. Compliance is achieved if the mass-

weighted emissions for the secondary aluminum processing unit ( $E_{\text{cPM}}$ ) is less than or equal to the emission limit for the secondary aluminum processing unit ( $L_{\text{cPM}}$ ) calculated using Equation 1 in § 63.1505(k).

$$E_{\text{cPM}} = \frac{\sum_{i=1}^n (E_{\text{tiPM}} \times T_{\text{ti}})}{\sum_{i=1}^n (T_{\text{ti}})} \quad (\text{Eq. 9})$$

Where,

$E_{\text{cPM}}$  = The mass-weighted PM emissions for the secondary aluminum processing unit;

$E_{\text{tiPM}}$  = Measured PM emissions for individual emission unit  $i$ ;

$T_{\text{ti}}$  = The average feed rate for individual emission unit  $i$  during the operating cycle or performance test period; and

$n$  = The number of emission units in the secondary aluminum processing unit.

(2) Use Equation 10 to compute the aluminum mass-weighted HCl emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit ( $E_{\text{cHCl}}$ ) is less than or equal to the emission limit for the secondary aluminum processing unit ( $L_{\text{cHCl}}$ ) calculated using Equation 2 in § 63.1505(k).

$$E_{\text{cHCl}} = \frac{\sum_{i=1}^n (E_{\text{tiHCl}} \times T_{\text{ti}})}{\sum_{i=1}^n (T_{\text{ti}})} \quad (\text{Eq. 10})$$

Where,

$E_{\text{cHCl}}$  = The mass-weighted HCl emissions for the secondary aluminum processing unit; and

$E_{\text{tiHCl}}$  = Measured HCl emissions for individual emission unit  $i$ .

(3) Use Equation 11 to compute the aluminum mass-weighted D/F emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit ( $L_{\text{cD/F}}$ ) calculated using Equation 3 in § 63.1505(k).

$$E_{\text{cD/F}} = \frac{\sum_{i=1}^n (E_{\text{tiD/F}} \times T_{\text{ti}})}{\sum_{i=1}^n (T_{\text{ti}})} \quad (\text{Eq. 11})$$

Where,

$E_{\text{cD/F}}$  = The mass-weighted D/F emissions for the secondary aluminum processing unit; and

$E_{\text{tiD/F}}$  = Measured D/F emissions for individual emission unit  $i$ .

(4) As an alternative to using the equations in paragraphs (e)(1), (2), and (3) of this section, the owner or operator may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in § 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in § 63.1505(j).

#### § 63.1514 [Reserved]

#### NOTIFICATIONS, REPORTS, AND RECORDS

#### § 63.1515 Notifications.

(a) *Initial notifications.* The owner or operator must submit initial notifications to the applicable permitting authority as described in paragraphs (a)(1) through (7) of this section.

(1) As required by § 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.

(2) As required by § 63.9(b)(3), the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is not required under § 63.5(d), must provide notification that the source is subject to the standard.

(3) As required by § 63.9(b)(4), the owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of this subpart and for which an

application for approval of construction or reconstruction is required by § 63.5(d) must provide the following notifications:

(i) Intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;

(ii) Date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction or reconstruction was commenced before the effective date of this subpart, or no later than 30 days after the date construction or reconstruction commenced if construction or reconstruction commenced after the effective date of this subpart);

(iii) Anticipated date of startup; and

(iv) Actual date of startup.

(4) As required by § 63.9(b)(5), after the effective date of this subpart, an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by § 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

(i) The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or

(ii) The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.

(5) As required by § 63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source.

(6) As required by § 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

(7) As required by § 63.9(g), the owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

(b) *Notification of compliance status report.* Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in § 63.1501. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

(1) All information required in § 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations

(including visible emission and opacity tests).

(2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).

(3) Unit labeling as described in § 63.1506(b), including process type or furnace classification and operating requirements.

(4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.

(5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in § 63.1506(c).

(6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in § 63.1510(f).

(7) Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in § 63.1505(e).

(8) Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 °F for each afterburner used to control emissions from a sweat furnace that is not subject to a performance test.

(9) Approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).

(10) Startup, shutdown, and malfunction plan, with revisions.

#### § 63.1516 Reports.

(a) *Startup, shutdown, and malfunction plan/reports.* The owner or operator

must develop and implement a written plan as described in § 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by § 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in § 63.6(e)(3). In addition to the information required in § 63.6(e)(3), the plan must include:

(1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and

(2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

(b) *Excess emissions/summary report.* As required by § 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in § 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

(1) A report must be submitted if any of these conditions occur during a 6-month reporting period:

(i) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.

(ii) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.

(iii) The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.

(iv) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive

chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).

(v) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3).

(vi) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.

(vii) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.

(2) Each report must include each of these certifications, as applicable:

(i) For each thermal chip dryer: "Only unpainted aluminum chips were used as feedstock in any thermal chip dryer during this reporting period."

(ii) For each dross-only furnace: "Only dross was used as the charge material in any dross-only furnace during this reporting period."

(iii) For each sidewall group 1 furnace with add-on air pollution control devices: "Each furnace was operated such that the level of molten metal remained above the top of the passage between the sidewall and hearth during reactive fluxing, and reactive flux, except for cover flux, was added only to the sidewall or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period."

(iv) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: "Each group 1 furnace without add-on air pollution control devices subject to emission limits in §63.1505(i)(2) processed only clean charge during this reporting period."

(v) For each group 2 furnace: "Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for

cover fluxes, during this reporting period."

(vi) For each in-line fluxer using no reactive flux: "Only nonreactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period."

(3) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

(c) *Annual compliance certifications.* For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

(1) Any period of excess emissions, as defined in paragraph (b)(1) of this section, that occurred during the year were reported as required by this subpart; and

(2) All monitoring, recordkeeping, and reporting requirements were met during the year.

#### §63.1517 Records

(a) As required by §63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

(1) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

(2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and

(3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

(b) In addition to the general records required by §63.10(b), the owner or operator of a new or existing affected

source (including an emission unit in a secondary aluminum processing unit) must maintain records of:

(1) For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter:

(i) If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.

(ii) If a continuous opacity monitoring system is used, records of opacity measurement data, including records where the average opacity of any 6-minute period exceeds 5 percent, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.

(iii) If an aluminum scrap shredder is subject to visible emission observation requirements, records of all Method 9 observations, including records of any visible emissions during a 30-minute daily test, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.

(2) For each affected source with emissions controlled by an afterburner:

(i) Records of 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and

(ii) Records of annual afterburner inspections.

(3) For each scrap dryer/delacquering kiln/decoating kiln and group 1 furnace, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating param-

eter value +14 °C (+25 °F), with a brief explanation of the cause of the excursion and the corrective action taken.

(4) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:

(i) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;

(ii) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.

(iii) If lime addition rate for a non-continuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in §63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).

(5) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.

(6) For each continuous monitoring system, records required by §63.10(c).

**§ 63.1518**

**40 CFR Ch. I (7–1–00 Edition)**

(7) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.

(8) Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan.

(9) Records of all charge materials for each thermal chip dryer, dross-only furnace, and group 1 melting/holding furnaces without air pollution control devices processing only clean charge.

(10) Operating logs for each group 1 sidewall furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewall and hearth during reactive flux injection and for adding reactive flux only to the sidewall or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.

(11) Operating logs for each in-line fluxer using no reactive flux materials documenting each flux gas, agent, or material used during each operating cycle.

(12) Records of all charge materials and fluxing materials or agents for a group 2 furnace.

(13) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.

(14) Records of annual inspections of emission capture/collection and closed vent systems.

(15) Records for any approved alternative monitoring or test procedure.

(16) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

(i) Startup, shutdown, and malfunction plan;

(ii) For major sources, OM&M plan; and

(iii) Site-specific secondary aluminum processing unit emission plan (if applicable).

(17) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

**OTHER**

**§ 63.1518 Applicability of general provisions.**

The requirements of the general provisions in subpart A of this part that are applicable to the owner or operator subject to the requirements of this subpart are shown in appendix A to this subpart.

**§ 63.1519 Delegation of authority.**

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the CAA, the authorities contained in paragraph (b) of this section are retained by the Administrator and are not transferred to a State.

(b) Applicability determinations pursuant to § 63.1.

**§ 63.1520 [Reserved]**

Table 1 to Subpart RRR--Emission Standards for New and Existing Affected Sources

Affected source/ Emission unit	Pollutant	Limit	Units
All new and existing affected sources and emission units that are controlled with a PM add-on control device and that choose to monitor with a COM; and all new and existing aluminum scrap shredders that choose to monitor with a COM or to monitor visible emissions	Opacity	10	percent
New and existing aluminum scrap shredder	PM	0.01	gr/dscf
New and existing thermal chip dryer	THC D/F <sup>a</sup>	0.80 2.50	lb/ton of feed $\mu\text{g TEQ/Mg of feed}$
New and existing scrap dryer/delacquering kiln/decoating kiln	PM HCl THC D/F <sup>a</sup>	0.08 0.80 0.06 0.25	lb/ton of feed lb/ton of feed lb/ton of feed $\mu\text{g TEQ/Mg of feed}$
Or Alternative limits if afterburner has a design residence time of at least 1 second and operates at a temperature of at least 1400 °F	PM HCl THC D/F <sup>a</sup>	0.30 1.50 0.20 5.0	lb/ton of feed lb/ton of feed lb/ton of feed $\mu\text{g TEQ/Mg of feed}$
New and existing sweat furnace	D/F <sup>a</sup>	0.80	ng TEQ/dscm @ 11% O <sub>2</sub> <sup>b</sup>
New and existing gross-only furnace	PM	0.30	lb/ton of feed



Pt. 63, Subpt. RRR, Table 1

40 CFR Ch. I (7-1-00 Edition)

New and existing in-line fluxer <sup>c</sup>	HCl	0.04	lb/ton of feed
	PM	0.01	lb/ton of feed
New and existing in-line fluxer with no reactive fluxing		No limit	Work practice: no reactive fluxing
New and existing rotary dross cooler	PM	0.04	gr/dscf
New and existing clean furnace (Group 2)		No limit	Work practices: clean charge only and no reactive fluxing
New and existing group 1 melting/holding furnace (processing only clean charge) <sup>c</sup>	PM	0.80	lb/ton of feed
	HCl	0.40	lb/ton of feed
		or 10	percent of the HCl upstream of an add-on control device
New and existing group 1 furnace <sup>c</sup>	PM	0.40	lb/ton of feed
	HCl	0.40	lb/ton of feed
		or 10	percent of the HCl upstream of an add-on control device
	D/F <sup>a</sup>	15.0	μg TEQ/Mg of feed
New and existing group 1 furnace <sup>c</sup> with clean charge only	PM	0.40	lb/ton of feed
	HCl	0.40	lb/ton of feed
		Or 10	percent of the HCl upstream of an add-on control device
	D/F <sup>a</sup>	No Limit	Clean charge only

New and existing secondary aluminum processing unit <sup>a,d</sup> (consists of all existing group 1 furnaces and existing in-line flux boxes at the facility, or all simultaneously constructed new group 1 furnaces and new in-line fluxers)	PM <sup>e</sup>	$L_{t_{PM}} = \frac{\sum_{i=1}^n (L_{i_{PM}} \times T_i)}{\sum_{i=1}^n (T_i)}$
	HCl <sup>f</sup>	$L_{t_{HCl}} = \frac{\sum_{i=1}^n (L_{i_{HCl}} \times T_i)}{\sum_{i=1}^n (T_i)}$
	D/F <sup>g</sup>	$L_{t_{D/F}} = \frac{\sum_{i=1}^n (L_{i_{D/F}} \times T_i)}{\sum_{i=1}^n (T_i)}$

<sup>a</sup> D/F limit applies to a unit at a major or area source.

<sup>b</sup> Sweat furnaces equipped with afterburners meeting the specifications of §63.1505(f)(1) are not required to conduct a performance test.

<sup>c</sup> These limits are also used to calculate the limits applicable to secondary aluminum processing units.

<sup>d</sup> Equation definitions:  $L_{i_{PM}}$  = the PM emission limit for individual emission unit  $i$  in the secondary aluminum processing unit [kg/Mg (lb/ton) of feed];  $T_i$  = the feed rate for individual emission unit  $i$  in the secondary aluminum processing unit;  $L_{t_{PM}}$  = the overall PM emission limit for the secondary aluminum processing unit [kg/Mg (lb/ton) of feed];  $L_{i_{HCl}}$  = the HCl emission limit for individual emission unit  $i$  in the secondary aluminum processing unit [kg/Mg (lb/ton) of feed];  $L_{t_{HCl}}$  = the overall HCl emission limit for the secondary aluminum processing unit [kg/Mg (lb/ton) of feed];  $L_{i_{D/F}}$  = the D/F emission limit for individual emission unit  $i$  [ $\mu$ g TEQ/Mg (gr TEQ/ton) of feed];  $L_{t_{D/F}}$  = the overall D/F emission limit for the secondary aluminum processing unit [ $\mu$ g TEQ/Mg (gr TEQ/ton) of feed];  $n$  = the number of units in the secondary aluminum processing unit.

<sup>e</sup> In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

<sup>f</sup> In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

<sup>g</sup> Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

TABLE 2 TO SUBPART RRR.—SUMMARY OF OPERATING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS

Affected source/emission unit	Monitor type/operation/process	Operating requirements
All affected sources and emission units with an add-on air pollution control device.	Emission capture and collection system.	Design and install in accordance with Industrial Ventilation: A Handbook of Recommended Practice; operate in accordance with OM&M plan. <sup>b</sup>
All affected sources and emission units subject to production-based (lb/ton of feed) emission limits <sup>a</sup> .	Charge/feed weight or Production weight.	Operate a device that records the weight of each charge; Operate in accordance with OM&M plan. <sup>b</sup>
Group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln.	Labeling .....	Identification, operating parameter ranges and operating requirements posted at affected sources and emission units; control device temperature and residence time requirements posted at scrap dryer/delacquering kiln/decoating kiln.
Aluminum scrap shredder with fabric filter.	Bag leak detector or .....	Initiate corrective action within 1-hr of alarm and complete in accordance with OM&M plan <sup>b</sup> ; operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM or .....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with OM&M plan. <sup>b</sup>
	VE .....	Initiate corrective action within 1-hr of any observed VE and complete in accordance with the OM&M plan. <sup>b</sup>
Thermal chip dryer with afterburner.	Afterburner operating temperature.	Maintain average temperature for each 3-hr period at or above average operating temperature during the performance test.
	Afterburner operation .....	Operate in accordance with OM&M plan. <sup>b</sup>
	Feed material .....	Operate using only unpainted aluminum chips.
Scrap dryer/delacquering kiln/decoating kiln with afterburner and lime-injected fabric filter.	Afterburner operating temperature.	Maintain average temperature for each 3-hr period at or above average operating temperature during the performance test.
	Afterburner operation .....	Operate in accordance with OM&M plan. <sup>b</sup>
	Bag leak detector or .....	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan; <sup>b</sup> operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM .....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan. <sup>b</sup>
	Fabric filter inlet temperature ...	Maintain average fabric filter inlet temperature for each 3-hr period at or below average temperature during the performance test +14 °C (+25 °F).
	Lime injection rate .....	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established during the performance test for continuous injection systems.
Sweat furnace with afterburner ...	Afterburner operating temperature.	If a performance test was conducted, maintain average temperature for each 3-hr period at or above average operating temperature during the performance test; if a performance test was not conducted, and afterburner meets specifications of § 63.1505(f)(1), maintain average temperature for each 3-hr period at or above 1600 °F.
	Afterburner operation .....	Operate in accordance with OM&M plan. <sup>b</sup>
Dross-only furnace with fabric filter.	Bag leak detector or .....	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan; <sup>b</sup> operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM .....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan. <sup>b</sup>
	Feed/charge material .....	Operate using only dross as the feed material.
Rotary dross cooler with fabric filter.	Bag leak detector or .....	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan; <sup>b</sup> operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM .....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan. <sup>b</sup>
In-line fluxer with lime-injected fabric filter (including those that are part of a secondary aluminum processing unit).	Bag leak detector or .....	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan; <sup>b</sup> operate such that alarm does not sound more than 5% of operating time in 6-month period.

TABLE 2 TO SUBPART RRR.—SUMMARY OF OPERATING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS—Continued

Affected source/emission unit	Monitor type/operation/process	Operating requirements
In-line fluxer (using no reactive flux material).	COM .....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan. <sup>b</sup>
	Lime injection rate .....	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established during performance test for continuous injection systems.
	Reactive flux injection rate .....	Maintain reactive flux injection rate at or below rate used during the performance test for each operating cycle or time period used in the performance test.
	Flux materials .....	Use no reactive flux.
	Bag leak detector or .....	Initiate corrective action within 1-hr of alarm; operate such that alarm does not sound more than 5% of operating time in 6-month period; complete corrective action in accordance with the OM&M plan. <sup>b</sup>
Group 1 furnace with lime-injected fabric filter (including those that are part of a secondary aluminum processing unit).	COM .....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more; complete corrective action in accordance with the OM&M plan. <sup>b</sup>
	Fabric filter inlet temperature ...	Maintain average fabric filter inlet temperature for each 3-hour period at or below average temperature during the performance test +14 &degC (+25 &degF).
	Reactive flux injection rate .....	Maintain reactive flux injection rate (lb/hr) at or below rate used during the performance test for each furnace cycle.
	Lime injection rate .....	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established at performance test for continuous injection systems.
	Maintain molten aluminum level	Operate side-well furnaces such that the level of molten metal is above the top of the passage between sidewall and hearth during reactive flux injection, unless the hearth is also controlled.
Group 1 furnace without add-on controls (including those that are part of a secondary aluminum processing unit).	Fluxing in sidewall furnace hearth.	Add reactive flux only to the sidewall of the furnace unless the hearth is also controlled.
	Reactive flux injection rate .....	Maintain reactive flux injection rate (lb/hr) at or below rate used during the performance test for each operating cycle or time period used in the performance test.
	Site-specific monitoring plan <sup>c</sup> ..	Operate furnace within the range of charge materials, contaminant levels, and parameter values established in the site-specific monitoring plan.
Clean (group 2) furnace .....	Feed material (melting/holding furnace).	Use only clean charge.
	Charge and flux materials .....	Use only clean charge. Use no reactive flux.

<sup>a</sup>Thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces including melting/holding furnaces.

<sup>b</sup>OM&M plan—Operation, maintenance, and monitoring plan.

<sup>c</sup>Site-specific monitoring plan. Owner/operators of group 1 furnaces without control devices must include a section in their OM&M plan that documents work practice and pollution prevention measures, including procedures for scrap inspection, by which compliance is achieved with emission limits and process or feed parameter-based operating requirements. This plan and the testing to demonstrate adequacy of the monitoring plan must be developed in coordination with and approved by the permitting authority.

TABLE 3 TO SUBPART RRR.—SUMMARY OF MONITORING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
All affected sources and emission units with an add-on air pollution control device.	Emission capture and collection system.	Annual inspection of all emission capture, collection, and transport systems to ensure that systems continue to operate in accordance with ACGIH standards.
All affected sources and emission units subject to production-based (lb/ton of feed/charge) emission limits <sup>a</sup> .	Feed/charge weight .....	Record weight of each feed/charge, weight measurement device or other procedure accuracy of $\pm 1\%$ <sup>b</sup> ; calibrate according to manufacturers specifications, or at least once every 6 months.

TABLE 3 TO SUBPART RRR.—SUMMARY OF MONITORING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS—Continued

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
Group 1 furnace, group 2 furnace, in-line fluxer, and scrap dryer/delacquering kiln/decoating kiln. Aluminum scrap shredder with fabric filter.	Labeling .....	Check monthly to confirm that labels are intact and legible.
	Bag leak detector or .....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" c; record voltage output from bag leak detector.
	COM or .....	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	VE .....	Conduct and record results of 30-minute daily test in accordance with Method 9.
Thermal chip dryer with afterburner.	Afterburner operating temperature.	Continuous measurement device to meet specifications in § 63.1510(g)(1); record average temperature for each 15-minute block; determine and record 3-hr block averages.
	Afterburner operation .....	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
	Feed/charge material .....	Record identity of each feed/charge; certify feed/charge materials every 6 months.
Scrap dryer/ delacquering kiln/decoating kiln with afterburner and lime injected fabric filter.	Afterburner operating temperature.	Continuous measurement device to meet specifications in § 63.1510(g)(1); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
	Afterburner operation .....	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
	Bag leak detector or .....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" c; record voltage output from bag leak detector.
	COM .....	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	Lime injection rate .....	For continuous injection systems, inspect each feed hopper or silo every 8 hrs to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hrs for 3 days; return to 8-hr inspections if corrective action results in no further blockage during 3-day period; record feeder setting daily.
	Fabric filter inlet temperature ...	Continuous measurement device to meet specifications in § 63.1510(h)(2); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
Sweat furnace with afterburner ...	Afterburner operating temperature.	Continuous measurement device to meet specifications in § 63.1510(g)(1); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
	Afterburner operation .....	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
Dross-only furnace with fabric filter.	Bag leak detector or .....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" c; record output voltage from bag leak detector.
	COM .....	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	Feed/charge material .....	Record identity of each feed/charge; certify charge materials every 6 months.
Rotary dross cooler with fabric filter.	Bag leak detector or .....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" c; record output voltage from bag leak detector.
	COM .....	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
In-line fluxer with lime-injected fabric filter.	Bag leak detector or .....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" c; record output voltage from bag leak detector.
	COM .....	Design and install in accordance with PS–1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages

Environmental Protection Agency

Pt. 63, Subpt. RRR, Table 3

TABLE 3 TO SUBPART RRR.—SUMMARY OF MONITORING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS—Continued

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
In-line fluxer using no reactive flux. Group 1 furnace with lime-injected fabric filter.	Reactive flux injection rate .....	Weight measurement device accuracy of $\pm 1\%$ <sup>b</sup> ; calibrate according to manufacturer's specifications or at least once every 6 months; record time, weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test; or Alternative flux injection rate determination procedure per § 63.1510(j)(5).
	Lime injection rate .....	For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every 8 hrs to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hrs for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period. <sup>d</sup>
	Flux materials .....	Record flux materials; certify every 6 months for no reactive flux.
	Bag leak detector or .....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" <sup>c</sup> ; record output voltage from bag leak detector.
	COM .....	Design and install in accordance with PS-1; collect data in accordance with subpart A of 40 part CFR 63; determine and record 6-minute block averages.
Group 1 furnace without add-on controls.	Lime injection rate .....	For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every 8 hours to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hours for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period. <sup>d</sup>
	Reactive flux injection rate Weight measurement device accuracy of $\pm 1\%$ <sup>b</sup> ; calibrate every 3 months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test; or. Alternative flux injection rate determination procedure per § 63.1510(j)(5).	
	Fabric filter inlet temperature ...	Continuous measurement device to meet specifications in § 63.1510(h)(2); record temperatures in 15-minute block averages; determine and record 3-hour block averages.
	Maintain molten aluminum level in sidewall furnace. Fluxing in sidewall furnace hearth.	Maintain aluminum level operating log; certify every 6 months. Maintain flux addition operating log; certify every 6 months.
	Reactive flux injection rate .....	Weight measurement device accuracy of $\pm 1\%$ <sup>b</sup> ; calibrate according to manufacturers specifications or at least once every six months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test.
Record type of permissible feed/charge material; certify charge materials every 6 months..	OM&M plan (approved by permitting agency).	Demonstration of site-specific monitoring procedures to provide data and show correlation of emissions across the range of charge and flux materials and furnace operating parameters.
	Feed material (melting/holding furnace).	

TABLE 3 TO SUBPART RRR.—SUMMARY OF MONITORING REQUIREMENTS FOR NEW AND EXISTING AFFECTED SOURCES AND EMISSION UNITS—Continued

Affected source/Emission unit	Monitor type/Operation/Process	Monitoring requirements
Clean (group 2) furnace .....	Charge and flux materials .....	Record charge and flux materials; certify every 6 months for clean charge and no reactive flux.

<sup>a</sup> Thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces or melting/holding furnaces.

<sup>b</sup> Permitting agency may approve measurement devices of alternative accuracy, for example in cases where flux rates are very low and costs of meters of specified accuracy are prohibitive; or where feed/charge weighing devices of specified accuracy are not practicable due to equipment layout or charging practices.

<sup>c</sup> Non-triboelectric bag leak detectors must be installed and operated in accordance with manufacturers' specifications.

<sup>d</sup> Permitting agency may approve other alternatives including load cells for lime hopper weight, sensors for carrier gas pressure, or HCl monitoring devices at fabric filter outlet.

APPENDIX A TO SUBPART RRR.—GENERAL PROVISIONS APPLICABILITY TO SUBPART RRR

Citation	Requirement	Applies to RRR	Comment
§ 63.1(a)(1)–(4) .....	General Applicability .....	Yes.	
§ 63.1(a)(5) .....	.....	No .....	[Reserved].
§ 63.1(a)(6)–(8) .....	.....	Yes.	
§ 63.1(a)(9) .....	.....	No .....	[Reserved].
§ 63.1(a)(10)–(14) .....	.....	Yes.	
§ 63.1(b) .....	Initial Applicability Determination	Yes .....	EPA retains approval authority.
§ 63.1(c)(1) .....	Applicability After Standard Es- tablished.	Yes.	
§ 63.1(c)(2) .....	.....	Yes .....	States have option to exclude area sources from title V per- mit program.
§ 63.1(c)(3) .....	.....	No .....	[Reserved].
§ 63.1(c)(4)–(5) .....	.....	Yes.	
§ 63.1(d) .....	.....	No .....	[Reserved].
§ 63.1(e) .....	Applicability of Permit Program ..	Yes.	
§ 63.2 .....	Definitions .....	Yes .....	Additional definitions in § 63.1503.
§ 63.3 .....	Units and Abbreviations .....	Yes .....	
§ 63.4(a)(1)–(3) .....	Prohibited Activities .....	Yes.	
§ 63.4(a)(4) .....	.....	No .....	[Reserved]
§ 63.4(a)(5) .....	.....	Yes.	
§ 63.4(b)–(c) .....	Circumvention/ Severability .....	Yes.	
§ 63.5(a) .....	Construction and Reconstruc- tion—Applicability.	Yes.	
§ 63.5(b)(1) .....	Existing, New, Reconstructed Sources—Requirements.	Yes.	
§ 63.5(b)(2) .....	.....	No .....	[Reserved].
§ 63.5(b)(3)–(6) .....	.....	Yes.	
§ 63.5(c) .....	.....	No .....	[Reserved].
§ 63.5(d) .....	Application for Approval of Construction/ Reconstruction.	Yes.	
§ 63.5(e) .....	Approval of Construction/ Recon- struction.	Yes.	
§ 63.5(f) .....	Approval of Construction/Recon- struction Based on State Re- view.	Yes.	
§ 63.6(a) .....	Compliance with Standards and Maintenance—Applicability.	Yes.	
§ 63.6(b)(1)–(5) .....	New and Reconstructed Sources—Dates.	Yes.	
§ 63.6(b)(6) .....	.....	No .....	[Reserved].
§ 63.6(b)(7) .....	.....	Yes.	
§ 63.6(c)(1) .....	Existing Sources Dates .....	Yes .....	§ 63.1501 specifies dates.
§ 63.6(c)(2) .....	.....	Yes.	
§ 63.6(c)(3)–(4) .....	.....	No .....	[Reserved].
§ 63.6(c)(5) .....	.....	Yes.	
§ 63.6(d) .....	.....	No .....	[Reserved].
§ 63.6(e)(1)–(2) .....	Operation & Maintenance Re- quirements.	Yes .....	§ 63.1510 requires plan.
§ 63.6(e)(3) .....	Startup, Shutdown, and Malfunc- tion Plan.	Yes.	
§ 63.6(f) .....	Compliance with Emission Standards.	Yes.	
§ 63.6(g) .....	Alternative Standard .....	No .....	

**Environmental Protection Agency**

**Pt. 63, Subpt. RRR, App. A**

**APPENDIX A TO SUBPART RRR.—GENERAL PROVISIONS APPLICABILITY TO SUBPART RRR—  
Continued**

Citation	Requirement	Applies to RRR	Comment
§ 63.6(h) .....	Compliance with Opacity/VE Standards.	Yes.	
§ 63.6(i)(1)–(14) .....	Extension of Compliance .....	Yes.	
§ 63.6(i)(15) .....		No .....	[Reserved].
§ 63.6(i)(16) .....		Yes.	
§ 63.6(j) .....	Exemption from Compliance .....	Yes.	
§ 63.7(a)–(h) .....	Performance Test Requirements—Applicability and Dates.	Yes .....	§ 63.1511 requires repeat tests every 5 years for major sources.
§ 63.7(b) .....	Notification .....	Yes.	
§ 63.7(c) .....	Quality Assurance/Test Plan .....	Yes.	
§ 63.7(d) .....	Testing Facilities .....	Yes.	
§ 63.7(e) .....	Conduct of Tests .....	Yes.	
§ 63.7(f) .....	Alternative Test Method .....	Yes.	
§ 63.7(g) .....	Data Analysis .....	Yes.	
§ 63.7(h) .....	Waiver of Tests .....	Yes.	
§ 63.8(a)(1) .....	Monitoring Requirements—Applicability.	Yes.	
§ 63.8(a)(2) .....		Yes.	
§ 63.8(a)(3) .....		No .....	[Reserved]
§ 63.8(a)(4) .....		Yes .....	
§ 63.8(b) .....	Conduct of Monitoring .....	Yes.	
§ 63.8(c)(1)–(3) .....	CMS Operation and Maintenance.	Yes.	
§ 63.8(c)(4)–(8) .....		Yes.	
§ 63.8(d) .....	Quality Control .....	Yes.	
§ 63.8(e) .....	CMS Performance Evaluation .....	Yes.	
§ 63.8(f)(1)–(5) .....	Alternative Monitoring Method .....	No .....	§ 63.1510(w) includes provisions for monitoring alternatives.
§ 63.8(f)(6) .....	Alternative to RATA Test .....	Yes.	
§ 63.8(g)(1) .....	Data Reduction .....	Yes.	
§ 63.8(g)(2) .....		No .....	§ 63.1512 requires five 6-minute averages for an aluminum scrap shredder.
§ 63.8(g)(3)–(5) .....		Yes.	
§ 63.9(a) .....	Notification Requirements—Applicability.	Yes.	
§ 63.9(b) .....	Initial Notifications .....	Yes.	
§ 63.9(c) .....	Request for Compliance Extension.	Yes.	
§ 63.9(d) .....	New Source Notification for Special Compliance Requirements.	Yes.	
§ 63.9(e) .....	Notification of Performance Test .....	Yes.	
§ 63.9(f) .....	Notification of VE/Opacity Test .....	Yes.	
§ 63.9(g) .....	Additional CMS Notifications .....	Yes.	
§ 63.9(h)(1)–(3) .....	Notification of Compliance Status .....	Yes.	
§ 63.9(h)(4) .....		No .....	[Reserved].
§ 63.9(h)(5)–(6) .....		Yes.	
§ 63.9(i) .....	Adjustment of Deadlines .....	Yes.	
§ 63.9(j) .....	Change in Previous Information .....	Yes.	
§ 63.10(a) .....	Recordkeeping/Reporting—Applicability.	Yes.	
§ 63.10(b) .....	General Requirements .....	Yes .....	§ 63.1517 includes additional requirements.
§ 63.10(c)(1) .....	Additional CMS Recordkeeping .....	Yes.	
§ 63.10(c)(2)–(4) .....		No .....	[Reserved].
§ 63.10(c)(5) .....		Yes.	
§ 63.10(c)(6) .....		Yes.	
§ 63.10(c)(7)–(8) .....		Yes.	
§ 63.10(c)(9) .....		No .....	[Reserved].
§ 63.10(c)(10)–(13) .....		Yes.	
§ 63.10(c)(14) .....		Yes.	
§ 63.10(d)(1) .....	General Reporting Requirements .....	Yes.	
§ 63.10(d)(2) .....	Performance Test Results .....	Yes.	
§ 63.10(d)(3) .....	Opacity or VE Observations .....	Yes.	
§ 63.10(d)(4)–(5) .....	Progress Reports/Startup, Shutdown, and Malfunction Reports.	Yes.	
§ 63.10(e)(1)–(2) .....	Additional CMS Reports .....	Yes.	
§ 63.10(e)(3) .....	Excess Emissions/CMS Performance Reports.	Yes.	



APPENDIX A TO SUBPART RRR.—GENERAL PROVISIONS APPLICABILITY TO SUBPART RRR—  
Continued

Citation	Requirement	Applies to RRR	Comment
§ 63.10(e)(4) .....	COMS Data Reports .....	Yes.	Flares not applicable. EPA retains authority for applicability determinations.
§ 63.10(f) .....	Recordkeeping/Reporting Waiver .....	Yes.	
§ 63.11(a)–(b) .....	Control Device Requirements .....	No .....	
§ 63.12(a)–(c) .....	State Authority and Delegations .....	Yes.	
§ 63.13 .....	Addresses .....	Yes.	Chapters 3 and 5 of ACGIH Industrial Ventilation Manual for capture/collection systems.
§ 63.14 .....	Incorporation by Reference .....	Yes.	
§ 63.15 .....	Availability of Information/Confidentiality.	Yes.	

### Subpart SSS [Reserved]

### Subpart TTT—National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting

SOURCE: 64 FR 30204, June 4, 1999, unless otherwise noted.

#### § 63.1541 Applicability.

(a) The provisions of this subpart apply to the following affected sources at primary lead smelters: sinter machine, blast furnace, dross furnace, process fugitive sources, and fugitive dust sources. The provisions of this subpart do not apply to secondary lead smelters, lead refiners, or lead remelters.

(b) Table 1 of this subpart specifies the provisions of subpart A that apply and those that do not apply to owners and operators of primary lead smelters. The following sections of part 63 apply to this subpart as stated in subpart A and Table 1: § 63.1 (Applicability), § 63.2 (Definitions), § 63.3 (Units and abbreviations), § 63.4 (Prohibited activities and circumvention), § 63.5 (Construction and reconstruction), § 63.7 (Performance testing requirements), § 63.8 (Monitoring requirements), § 63.12 (State authority and delegations), § 63.13 (Addresses of State air pollution control agencies and EPA Regional Offices), § 63.14 (Incorporations by reference), and § 63.15 (Availability of information confidentiality). The following sections of part 63 apply to the extent specified in this subpart and Table 1: § 63.6 (Compliance with standards and maintenance requirements), § 63.9 (Notifica-

tion requirements), and § 63.10 (Recordkeeping and reporting requirements). Section § 63.11 (Control device requirements) does not apply to this subpart.

#### § 63.1542 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

*Bag leak detection system* means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse in order to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

*Blast furnace* means any reduction furnace to which sinter is charged and which forms separate layers of molten slag and lead bullion.

*Building* means a roofed and walled structure with limited openings to allow access and egress for people and vehicles.

*Charging location* means the physical opening through which raw materials are introduced into a sinter machine, blast furnace, or dross furnace.

*Dross furnace* means any smelting furnace to which drosses are charged and which chemically and physically separates lead from other impurities.

*Drossing and refining kettle* means an open-top vessel that is constructed of cast iron or steel and is indirectly heated from below and contains molten lead for the purpose of drossing, refining, or alloying lead. Included are pot